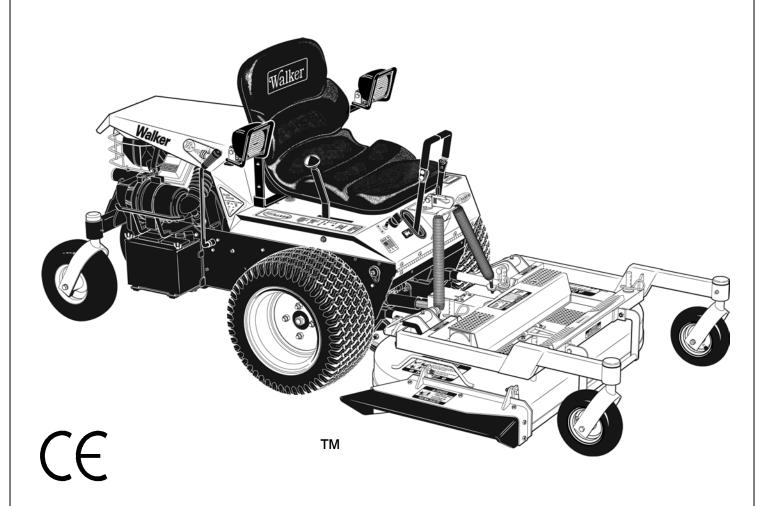
# Walker Rider Lawnmowers

# **OWNER'S MANUAL**

Safety, Assembly, Operating, and Maintenance Instructions

# and ILLUSTRATED PARTS MANUAL

Model MBV (18 HP) Model MBK (18 HP)



#### Please Read and Save These Instructions

For Safety, Read All Safety and Operation Instructions Prior to Operating Machine

Effective Date: 04-01-10

P/N 4000-4



#### **Foreword**

**Thank you...** for purchasing a Walker mower. Every effort has been made to provide you with the most reliable mower on the market, and we are sure you will be among our many satisfied customers. If for any reason this product does not perform to your expectations, please contact us at (970) 221-5614. Every customer is important to us. Your satisfaction is our goal.

**Please. .** read this manual thoroughly! This manual is to be used in conjunction with the engine manufacturer's manual for the specific engine on the mower model you have purchased. Before you operate your new mower, please read this entire manual. Some of the information is crucial for proper operation and maintenance of this mower - it will help protect your investment and ensure that the mower performs to your satisfaction. Some of the information is important to your safety, and must be read and understood to help prevent possible injury to the operator or others. If anything in this manual is confusing or hard to understand, please contact your local authorized dealer or call our service department, at (970) 221-5614, for clarification before operating or servicing this mower.

This manual covers Model MBV with the Briggs & Stratton Vanguard (18.0 HP) gasoline engine and Model MBK with the Kohler Command CH18 (18.0 HP) gasoline engine.

All shields and guards must be in place for the proper and safe operation of this machine. Where they are shown removed in this manual, it is for illustration purposes only. Do not operate this machine unless all shields and guards are in place.

Specifications given are based on the latest information available at the time this manual was produced.

Walker Mfg. Co. is continually striving to improve the design and performance of its products. We reserve the right to make changes in specifications and design without thereby incurring any obligation relative to previously manufactured products.

SINCERELY,
WALKER MANUFACTURING COMPANY

Bob Walker, President

# **Table of Contents**

Owner's Manual	
General Information	1
HIGHLIGHTED INFORMATION	
GLOSSARY	1
IDENTIFYING NUMBER LOCATIONS	1
ENGINE SERIAL NUMBER LOCATION	2
Model MBV	2
Model MBK	2
SERVICING OF ENGINE AND	
DRIVETRAIN COMPONENTS	2
Specifications	3
ENGINE	3
ELECTRICAL SYSTEM	3
TRANSMISSION	4
BLADE DRIVE	
TIRE SIZE	_
TIRE PRESSURE	
DIMENSIONS (Tractor and Mower)	5
MOWER DECK	
CURB WEIGHT	6
DRIVE BELTS	
SEAT	6
FRAME/BODY CONSTRUCTION	6
Component Identification	7
Safety Instructions	11
BEFORE OPERATING	
OPERATING	;; 13
OPERATING	15 15
SAFETY, CONTROL, AND	
INSTRUCTION DECALS	16
Assembly Instructions	18
•	
SETUP INSTRUCTIONS	18
Battery Service	18 18
Deck Caster Wheels Installation	18 18
Deck Caster Wheels Installation	18
PTO Shaft Guard Installation	10 19
Tilt-Up Roller Wheel Installation	—— 13 19
Mower Deck Installation on Tractor	19
Deck Installation - Model MBV	—— 13 19
Deck Installation - Model MBK	<sub>20</sub>
Deck Leveling PREOPERATING CHECKLIST	23
- <del></del>	

On anoting Instructions	00
Operating Instructions	26
CONTROL IDENTIFICATION,	
LOCATION, AND FUNCTION	26
Ignition Switch	26
Engine Choke	27
Engine Throttle	27
Engine Throttle Forward Speed Control (FSC)	27
Steering Levers	27
Steering LeversBlade Clutch (PTO)	27
Parking Brake	28
Parking BrakeTransaxle Lockout Rods	28
Hourmeter	28
STARTING THE ENGINE	30
ADJUSTING GROUND	
SPEED AND STEERING	30
ENGAGING THE MOWER	32
STOPPING THE MACHINE	33
STOPPING THE MACHINEADJUSTING CUTTING HEIGHT	33
TRANSAXI F LOCKOLITS	34
TRANSAXLE LOCKOUTS RECOMMENDATIONS FOR MOWING RECOMMENDATIONS FOR TILT-UP DECK	34
RECOMMENDATIONS FOR TILT-LIP DECK	0-1
OPERATION/TRANSPORT	36
	00
Maintenance Instructions	37
MAINTENANCE SCHEDULE CHART	37
IMPORTANT TIPS FOR CARE OF THE	
<b>BRIGGS &amp; STRATTON ENGINE - MODEL MBV</b>	
Fuel System	38
Starting/Stopping	
Cooling System	38
Air Cleaner System	38
Oil	38
IMPORTANT TIPS FOR CARE OF THE	
KOHLER ENGINE - MODEL MBK	
Fuel System	39
Starting/Stopping	
Cooling System	39
	39
	39
	40
Engine Oil - Model MBV	40
Engine Break-In Oil	40
Checking Engine Crankcase Oil Level	
Changing Engine Crankcase Oil/Oil Filter	
Engine Oil - Model MBK	42
Engine Break-In Oil	42
Checking Engine Crankcase Oil Level	
Changing Engine Crankcase Oil/Oil Filter	
Grease Fitting and Oil Point Lubrication	
Mower Deck Gearbox Lubrication	
Transaxle Lubrication	46
Transayle Oil and Filter Change	46

### **Table of Contents**

CLEANING	47
Engine Air Cooling System	
Cylinder Head Cooling Fins	·. 48
Engine Air Cleaner System	40
Cummins/Fleetguard OptiAir™	
Air Cleaner	49
Grass Buildup in Mower Housing	
Transaxle Cooling Fins	52
CHECKING/SERVICING	53
Security of Air Cleaner System	53
Batterv	53
Cleaning the Terminals	_ 53
Charging the Battery	_ 53
Tire Pressure	
Wheel Nut Torque	
Sharpen Mower Blades	 53
Drive Belts	55
Mower Deck Gearbox Oil Seals	_ 55
Snark Plugs	55
Breaker Points - Model MBV	 55
Fuel Lines and Clamps	 55
Blade Brake Action	
PTO U-Joints	55
Engine Starter - Model MBK	55
Safety Switch System	56
Forward Speed Control Friction Lock	56
REPLACING/REPAIRING	
Drive Belts	57
Engine/PTO Belt	_ 58
Ground Drive Belt	_ 59
Fuel Filter	60
Blade Overload Shear Bolts	_ 61
PTO Shear Pin	61
Mower Blades	62
ADJUSTMENTS	63
Transmission Control	63
Steering Lever Position Adjustment	_ 63
Steering Handles Adjustment	
Neutral Position Adjustment	_ 64
Full Forward Speed Adjustment	66
Straight Tracking Adjustment	
Neutral Switch Adjustment	_ 67
Forward Speed Control	
Friction Adjustment	_ 67
Blade Clutch (PTO)	_ 68
Clutch Engagement/Belt Tension	_
Clutch Disengagement/Brake Action	_ 69
Idler Pulley MaximumTravel Adjustment	_ 69
Blade Brake Band Adjustment	
Tilt-Up Deck Adjustable Stop	_ 71
ELECTRICAL SYSTEM	71

### **Illustrated Parts Manual**

TRACTOR DECALS	72
BODY / CHASSIS ASSEMBLY	74
MAIN COMPONENT POWER TRANSMISSION	76
ENGINE GROUP (MODEL MBV)	78
ENGINE GROUP (MODEL MBK)	80
HYDROSTATIC GROUND	
DRIVE ASSEMBLIES	82
STEERING CONTROL ASSEMBLIES	84
ELECTRICAL ASSEMBLY (MODEL MBV)	86
ELECTRICAL ASSEMBLY (MODEL MBK)	88
LIGHT KIT / HITCH KIT	90
WIRING SCHEMATIC (MODEL MBV)	92
WIRING SCHEMATIC (MODEL MBK)	93
Maintenance and Service	
Record Sheet	94
Warranty	95

### **General Information**

#### **HIGHLIGHTED INFORMATION**

Walker Manufacturing recommends that any service requiring special training or tools be performed by an authorized Walker Mower Dealer. There are several general practices to be aware of in the area of safety. Most accidents associated with the operation or maintenance of a Walker Mower are caused by disregarding basic safety precautions or specific warnings. Such accidents, in most cases, can be prevented by being aware of the dangers present.

Information of special importance has been highlighted in bold type in this manual. Refer to Safety Instructions for the meanings of DANGER, WARN-ING, CAUTION, IMPORTANT, and NOTE.

#### **GLOSSARY**

There are many terms that are either unique to this equipment or that are used as acronyms. The following terms and their definitions will help while using this manual:

- DECK is the mowing attachment mounted on the front of the tractor which includes the carrier frame, deck housing, blade drive gearboxes, and cutter blades.
- FORWARD SPEED CONTROL (FSC) controls the maximum forward speed of the tractor; functioning as a cruise control.
- GROUND DRIVE refers to the dual transaxles which drive the main wheels.
- TRANSAXLE transmits and controls power from the ground drive belt to the main drive wheel.
- LEFT HAND (LH) refers to the left-hand side of the tractor when the operator is seated facing forward in the tractor seat.
- **POWER TAKE-OFF (PTO)** transmits engine power to run the cutter blades.
- RIGHT HAND (RH) refers to the right-hand side of the tractor when the operator is seated facing forward in the tractor seat.
- **SIDE DISCHARGE (SD)** mows but does not collect the mowed material.

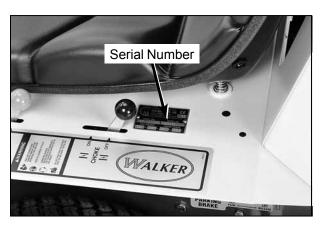
- STEERING LEVERS steer the tractor by controlling the two transaxles.
- TRACTOR is the prime mover, including the engine, drive train, operator seat, and controls to operate the mower.
- TRANSAXLE LOCKOUT RODS release the transaxles to permit freewheeling the tractor.

#### **IDENTIFYING NUMBER LOCATIONS**

The tractor serial number plate is affixed to the tractor body just below the left rear corner of the seat. The mower deck serial number plate is affixed alongside the angle iron framing on the LH side of the LH mower blade drive. Model and serial numbers are helpful when obtaining replacement parts and maintenance assistance. For ready reference, please record these numbers in the space provided.

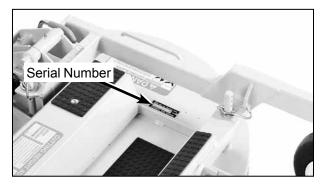
Tractor Model No.	
Tractor Serial No.	
Deck Serial No.	
Engine Model No.	
Engine Serial No.	
Date of Purchase	

#### Fill In By Purchaser



**Tractor Serial Number Location** 

### **General Information**



**Mower Deck Serial Number Location** 

# ENGINE SERIAL NUMBER LOCATION Model MBV

The Briggs & Stratton engine model, type, and code numbers are located on the left hand of the engine shroud. For the mower model covered by this manual, contact a Briggs & Stratton servicing dealer.



**Engine Serial Number Location** 

#### **Model MBK**

Refer to the engine manual that accompanies this manual for the location of the engine serial number. For the mower model covered by this manual, an engine manual is available from Kohler covering the Kohler Command CH18 gasoline engine.



**Engine Serial Number Location** 

### SERVICING OF ENGINE AND DRIVETRAIN COMPONENTS

The detailed servicing and repair of the engine, transaxle, and gearboxes are not covered in this manual. Only routine maintenance and general service instructions are provided. For the service of these components during the limited warranty period, it is important to find a local, authorized servicing agent of the component manufacturer. Any unauthorized work done on these components during the warranty period may void the warranty. If you have any difficulty finding an authorized outlet or obtaining warranty service, please contact our Service Department for assistance:

#### **Walker Manufacturing Company**

5925 E. Harmony Road Fort Collins, CO 80528 1-970-221-5614

Service manuals are available for each of these components from their respective manufacturers as follows:

Briggs & Stratton Briggs & Stratton

Engine

800-233-3723 (24-hour hotline in USA & Canada)

www.briggsandstratton.com

Kohler Engine Kohler Company

Kohler, WI 53044 800-544-2444

www.kohlerengines.com

Transaxle **Hvdro-Gear** 

1411 South Hamilton St. Sullivan, IL 61951

Gearboxes (Deck) Tecumseh Power Co.

1555 S. Jackson Street Salem, IN 47167 812-883-3575

MODEL	MBV	MBK
ENGINE		
Manufacturer/Model	Briggs & Stratton Vanguard, 2 Cyl. OHV (Air-Cooled)	Kohler Command, 2 Cyl. (Air-Cooled)
Displacement	34.7 cu. in. (570 cc)	38.0 cu. in. (624 cc)
HP (@ 3600 RPM)	18.0	18.0
Max. RPM (No Load)	3600 ± 100	3750
Governed RPM	3600 ± 100	3600
Max. Torque [ft-lb (N·m) @ RPM]	29.5 (40.0) @ 2400	32.2 (43.7) @ 2200
Idle RPM	1750	1200 ± 75
Spark Plug Type	Champion <sup>®</sup> RC14YC	Champion® RC12YC
Spark Plug Gap	.030 in. (0.75 mm)	.030 in. (0.75 mm)
Crankcase Capacity	1.5 qts (1.4 liters)	2 qts (1.9 liters)
Crankcase Lubricant	SF/SG/SH/SJ or Higher Grade Oil Only with 30W Viscosity Above 40° F (4° C)	APISG or SH Grade Oil Only with 10W-30 Viscosity above 0° F (-18° C), or 5W-20 or 5W-30 Viscosity below 32° F (0° C)
Oil Filter	492932	12-050-01
Fuel Tank Capacity	3 Gallons (11.35 liters)	3 Gallons (11.35 liters)
Fuel	Automotive Grade Unleaded Gasoline (87 Octane)	Automotive Grade Unleaded Gasoline (87 Octane)
Cooling System	Air Cooled	Air Cooled
<b>5</b> ,		
ELECTRICAL SYSTEM		
	12 Volt, 275 CCA	12 Volt, 275 CCA
ELECTRICAL SYSTEM	12 Volt, 275 CCA Flywheel Alternator	12 Volt, 275 CCA Flywheel Alternator
ELECTRICAL SYSTEM Battery		
ELECTRICAL SYSTEM Battery Charging System	Flywheel Alternator	Flywheel Alternator
ELECTRICAL SYSTEM  Battery  Charging System  Charging Output	Flywheel Alternator 16 Amp DC (Regulated)	Flywheel Alternator 15 Amp DC (Regulated)
ELECTRICAL SYSTEM  Battery  Charging System  Charging Output  System Polarity	Flywheel Alternator 16 Amp DC (Regulated) Negative Ground	Flywheel Alternator 15 Amp DC (Regulated) Negative Ground
ELECTRICAL SYSTEM  Battery  Charging System  Charging Output  System Polarity  Ignition	Flywheel Alternator 16 Amp DC (Regulated) Negative Ground Magnetron® Electronic 12 Volt Electric Key and	Flywheel Alternator 15 Amp DC (Regulated) Negative Ground Electronic Capacitive Discharge 12 Volt Electric Ring-Gear

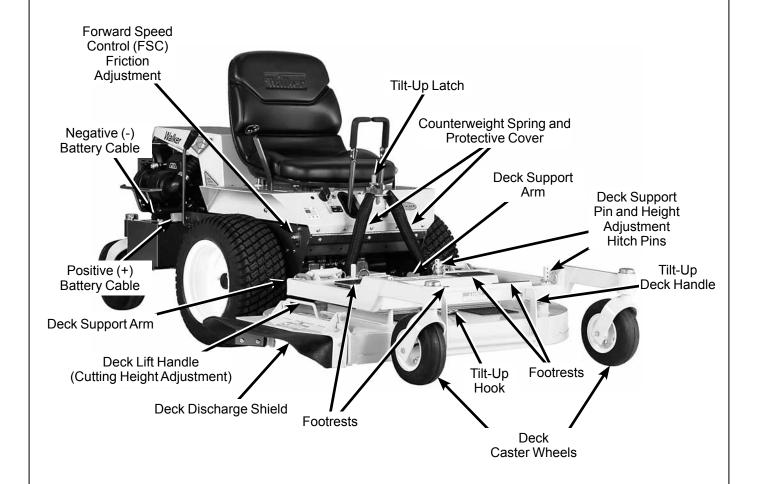
MODEL	MBV	MBK
TRANSMISSION		
Manufacturer/Model	Dual, Independent Hydro-Gear® Integrated Transaxles	Dual, Independent Hydro-Gea Integrated Transaxles
Steering	Hand Lever Control / Individual Wheel	Hand Lever Control / Individua Wheel
Forward Speed Control	Precision Friction Lock Lever, Cruise Control, with Neutral- Park Position	Precision Friction Lock Lever, Cruise Control, with Neutral- Park Position
Service Brake	Mechanical Lockout for each Transmission (Single Lever Control)	Mechanical Lockout for each Transmission (Single Lever Control)
Parking Brake	Mechanical Cog Lock on Transmission Gear	Mechanical Cog Lock on Transmission Gear
Neutral	Transmission Release by Manual Dump Valve	Transmission Release by Manual Dump Valve
Final Drive	Direct Drive Axle from Transaxle	Direct Drive Axle from Transaxle
Transmission Fluid		
Factory Service	20W-50 Multi-Viscosity Motor Oil (Minimum SL Grade Oil)	20W-50 Multi-Viscosity Motor Oil (Minimum SL Grade Oil)
Transmission Fluid Capacity	79 fl oz (2336 ml)	79 fl oz (2336 ml)
Transmission Cooling	Cooling Fan Mounted on Drive Pulley	Cooling Fan Mounted on Drive Pulley
Ground Travel Speed		
Forward m.p.h. (km/h) Reverse m.p.h. (km/h)	0-8 (0-13) Infinitely Variable 0-8 (0-13) Infinitely Variable	0-8 (0-13) Infinitely Variable 0-8 (0-13) Infinitely Variable
BLADE DRIVE		
PTO Shaft	Sliding Spline Shaft with Two High-Speed U-Joints	Quick Disconnect Splined Shawith Two High-Speed U-Joints
Blade Spindle	Each Blade (2) Mounts Direct on Peerless Right Angle Gearbox with Tee Gearbox in Center Connected to PTO Shaft (Complete Geared Drive, Peerless Model 1000 Gearboxes)	Each Blade (2) Mounts Direct on Peerless Right Angle Gearbox with Tee Gearbox in Center Connected to PTO Shaft (Complete Geared Drive Peerless Model 1000 Gearboxes)
Blade Drive Clutch and Brake	Manual Belt Tightener Clutch and Band Brake [Stops Blades within Five (5) Seconds of Disengagement]	Manual Belt Tightener Clutch and Band Brake [Stops Blades within Five (5) Seconds of Disengagement]
Max. Blade Speed [22 in. (56 cm) Blade] @ 3600 RPM Engine	2900 RPM [16700 FPM (5090 m/min)]	2900 RPM [16700 FPM (5090 m/min)]

MODEL	MBV	MBK
TIRE SIZE		
Deck Caster Wheel	2.80/2.50-4 Pneumatic (4-Ply)	2.80/2.50-4 Pneumatic (4-Ply)
Deck Caster Wheel (Optional)	8 x 3.00-4 Foamed Rubber	8 x 3.00-4 Foamed Rubber
Drive	18 x 8.50-10 (4-Ply Low-Profile)	18 x 8.50-10 (4-Ply Low-Profil
Rear	11 x 4.00-5	11 x 4.00-5
TIRE PRESSURE		
Deck Caster Wheel	20 PSI (137 kPa)	20 PSI (137 kPa)
Drive	15 PSI (103 kPa)	15 PSI (103 kPa)
Rear	20 PSI (137 kPa)	20 PSI (137 kPa)
DIMENSIONS (Tractor and Mow	er)	
Length		
	82 in. (208 cm)	82 in. (208 cm)
Width		
36 in. (91 cm) SD Model (with Deflector)	41-3/4 in. (106 cm)	41-3/4 in. (106 cm)
42 in. (107 cm) SD Model (with Deflector)	47-3/4 in. (121 cm)	47-3/4 in. (121 cm)
48 in. (122 cm) SD Model (with Deflector)	53-3/4 in. (137 cm)	53-3/4 in. (137 cm)
52 in. (132 cm) SD Model (with Deflector)		63 in. (160 cm)
56 in. (142 cm) SD Model (with Deflector)	61-3/4 in. (157 cm)	61-3/4 in. (157 cm)
Height	40-1/2 in. (103 cm)	40-1/2 in. (103 cm)
Wheel Base (Tractor)	38-1/2 in. (98 cm)	38-1/2 in. (98 cm)
Tread Width (Tractor)	29-3/4 in. (76 cm)	29-3/4 in. (76 cm)
MOWER DECK		
Width of Cut	36-, 42-, 48-, 52-, or 56-in. (91, 107, 122, 132 or 142 cm)	36-, 42-, 48-, 52-, or 56-in. (91, 107, 122, 132 or 142 cm)
Cutting Height	1 to 4 in. (3 to 10 cm)	1 to 4 in. (3 to 10 cm)
Height Adjustment	7 Positions - 1/2 in. (1 cm) Increment Hitch Pins Installed in Multi-Position Deck Support	7 Positions - 1/2 in. (1 cm) Increment Hitch Pins Installed in Multi-Position Deck Support

MODEL	MBV	MBK
MOWER DECK (continued)		
Blade Size		
36 in. (91 cm) SD Model	20 in. (51 cm) Two (2) Clock- wise-Rotating Blades with a 4 in. (10 cm) Center Overlap	20 in. (51 cm) Two (2) Clockwise-Rotating Blades with a 4 in. (10 cm) Center Overlap
42 in. (107 cm) SD Model	22 in. (56 cm) Two (2) Clock- wise-Rotating Blades with a 2 in. (5 cm) Center Overlap	22 in. (56 cm) Two (2) Clockwise-Rotating Blades with a 2 in. (5 cm) Center Overlap
48 in. (122 cm) SD Model	25 in. (64 cm) Two (2) Clock- wise-Rotating Blades with a 2 in. (5 cm) Center Overlap	25 in. (64 cm) Two (2) Clock- wise-Rotating Blades with a 2 in. (5 cm) Center Overlap
56 in. (142 cm) SD Model	20 in. (51 cm) Three (3) Clock- wise-Rotating Blades with a 2 in. (5 cm) Center Overlap	20 in. (51 cm) Three (3) Clock wise-Rotating Blades with a 2 in. (5 cm) Center Overlap
Deck Suspension	Torsion-Flex Frame with Caster Wheels and Counterweight Springs	Torsion-Flex Frame with Cast Wheels and Counterweight Springs
CURB WEIGHT (Approximate)		
Tractor Only	562 lb (255 kg)	560 lb (254 kg)
SD Tractor and 36 in. SD Deck	696 lb (316 kg)	696 lb (316 kg)
SD Tractor and 42 in. SD Deck	775 lb (352 kg)	773 lb (351 kg)
SD Tractor and 48 in. SD Deck	756 lb (343 kg)	756 lb (343 kg)
DRIVE BELTS		
Engine PTO	Walker P/N 4230-1	Walker P/N 4230-1
Ground Drive	Walker P/N 4248	Walker P/N 4248
SEAT	Contour-Molded, with Nylon Backed Vinyl Cover and Integral Foam Cushion	Contour-Molded, with Nylon Backed Vinyl Cover and Integral Foam Cushion
FRAME/BODY CONSTRUCTION		
Frame/Body	3/16 Plate Steel	3/16 Plate Steel
Deck	11 Gauge Steel	11 Gauge Steel

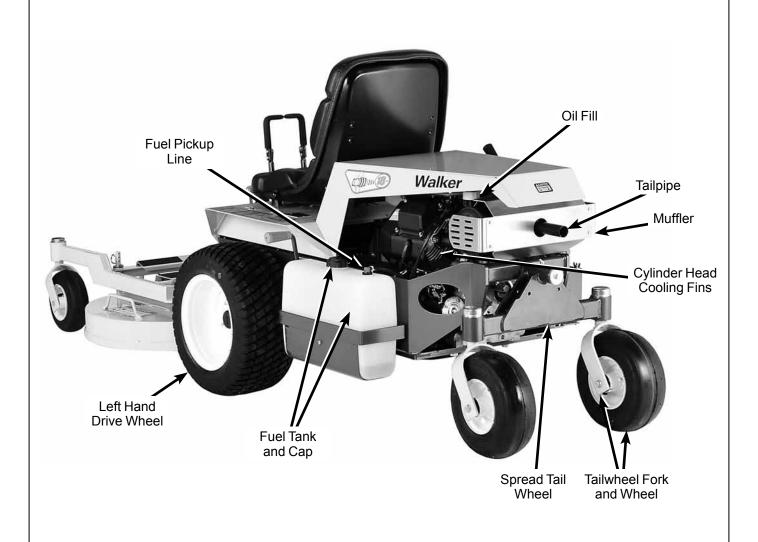
**NOTE:** The manufacturer reserves the right to make changes in specifications shown herein at any time without notice or obligation.

NOTE: Control Identification shown in Operating Instructions section.



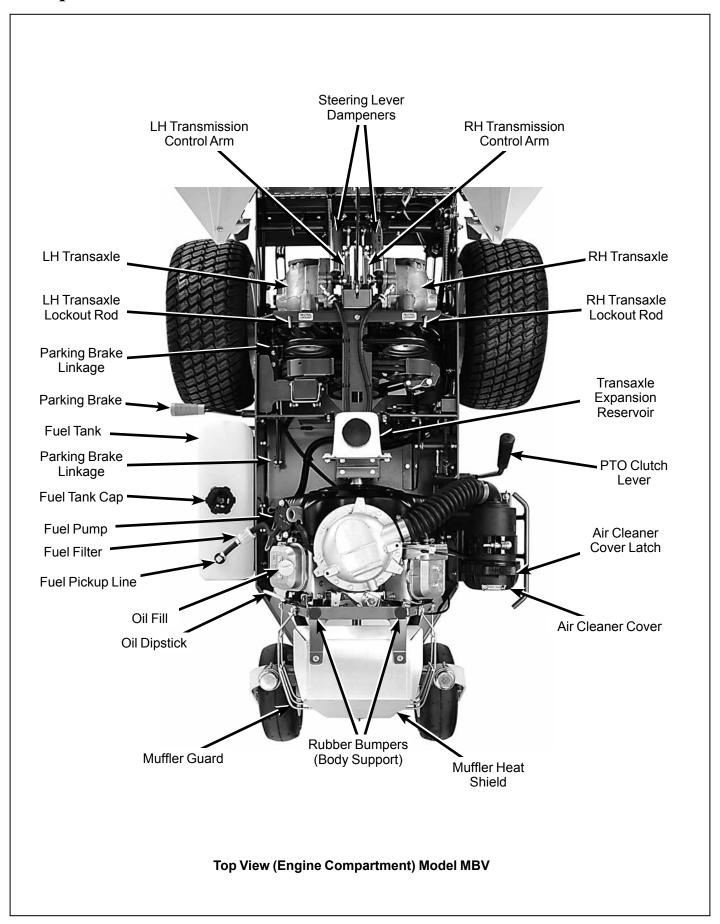
NOTE: Model MBK Shown

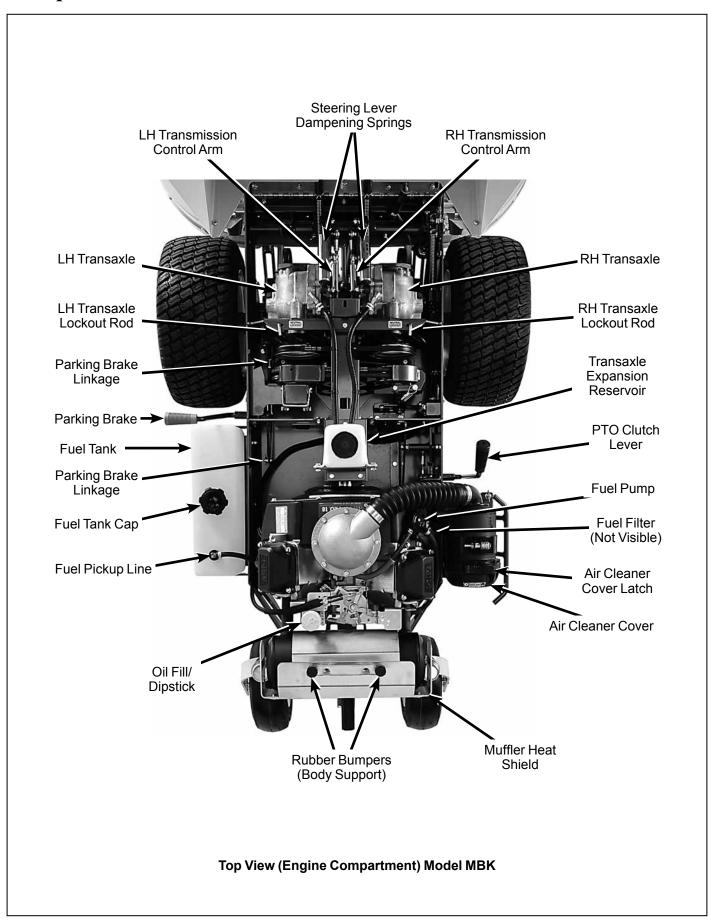
Front View and Right Side View



NOTE: Model MBK Shown

Rear View and Left Side View





Pay particular attention to any information labeled DANGER, WARNING, CAUTION, IMPORTANT, and **NOTE** in this manual.

When you see the Safety Alert Symbol ( ), read, understand, and follow the instructions. Failure to comply with safety instructions may result in personal injury.

The seriousness or degree of importance of each type of information is defined as follows:



#### DANGER

An IMMEDIATE hazard that WILL result in severe personal injury or DEATH, if warning is ignored and proper safety precautions are not taken.



#### **⚠** WARNING

A POTENTIAL hazard that COULD result in severe personal injury or DEATH, if warning is ignored and proper safety precautions are not taken.



### **A** CAUTION

Possible hazards or unsafe practices that MAY result in MODERATE personal injury or property damage, or machine damage, if warning is ignored and proper safety precautions are not taken.

**IMPORTANT:** Identifies mechanical information demanding special attention, since it deals with the possibility of damaging a part or parts of the machine.

NOTE: Identifies information worthy of special attention.

Walker Manufacturing cannot predict every potentially dangerous situation. Therefore, items labeled as such in this manual do not cover all conceivable situations. Any person using procedures, tools, or control techniques not recommended by Walker Manufacturing must take full responsibility for safety.

The Walker Rider Lawnmower has been designed with many safety features to protect the operator from personal harm or injury. However, it is necessary for the operator to use safe operating procedures at all times. Failure to follow safety instructions contained in this manual may result in personal injury or damage to equipment or property.

If you have any questions concerning setup, operation, maintenance, or safety, please contact your authorized Walker Mower Dealer or call Walker Manufacturing Company at (970) 221-5614.

#### **BEFORE OPERATING**

Read and understand the contents of this Owner's Manual before starting and operating the machine. Become thoroughly familiar with all machine controls and how to stop the machine and disengage the controls guickly. Replacement Owner's Manuals are available by sending the Model and Serial Number to:

### **Walker Manufacturing Company**

5925 East Harmony Road Fort Collins, CO 80528

- Never allow children to operate rider mower. Do not allow adults to operate without proper instruction.
- Clear the area to be mowed of any foreign objects which may be picked up and thrown by cutter blades. Pick up all sticks, stones, wire, and any other debris.
- Keep everyone, especially children and pets, a safe distance away from the area being mowed. Do not mow with bystanders in the area.
- Do not operate the machine barefoot or wearing sandals, sneakers, tennis shoes, or similar lightweight footwear. Wear substantial protective footwear.

- 6. Do not wear loose fitting clothing that could get caught in moving parts. Do not operate this machine while wearing shorts; always wear adequate protective clothing, including long pants. Wearing safety glasses, safety shoes, and a helmet is advisable and required by some local ordinances and insurance regulations.
- 7. Prolonged exposure to loud noise can cause impairment or loss of hearing. Operator hearing protection is recommended. Wear a suitable hearing protective device, such as earmuffs or earplugs.
- 8. Keep all protective shields and safety devices in place. If a protective shield, safety device, or decal is damaged, unusable, or missing, repair or replace it before operating the machine.
- 9. Be sure interlock switches are functioning correctly, so the engine cannot be started unless the Forward Speed Control lever is in the **NEUTRAL-PARK** position, and the PTO clutch is in the DISENGAGED position. Also, the engine should stop if the operator lifts off the seat with the PTO clutch in the **ENGAGED** position.
- 10. Handle gasoline with care. Gasoline is highly flammable and its vapors are explosive:
  - a. Use an approved fuel container.
  - b. Never add fuel to a running engine or hot engine (allow hot engine to cool several minutes).
  - c. Keep matches, cigarettes, cigars, pipes, open flames, or sparks away from the fuel tank and fuel container.
  - d. Always fill the fuel tank outdoors using care. Fill to about one inch from the top of the tank. Use a funnel or spout to prevent spilling.
  - e. Replace the machine fuel cap and container cap securely and clean up any spilled fuel before starting the engine.
- 11. Never attempt to make any adjustments while the engine is running, except where specifically instructed to do so.

12. The electrical system battery contains sulfuric acid. Avoid any contact with skin, eyes, and clothing. Keep the battery and acid out of reach of children.



#### **WARNING**

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

#### **OPERATING**

- Operate the mower only in daylight or in good artificial light with good visibility of the area being mowed.
- Sit on the seat when starting the engine and operating the machine. Keep feet on the deck footrests at all times when the tractor is moving and/or mower blades are operating. Never operate the tractor without a deck or implement installed.
- 3. For a beginning operator, learn to steer (maneuver) the tractor with a slow engine speed before attempting any mowing operation. Be aware that, with the front mounted mower configuration, the back of the tractor swings to the outside during turns.



#### **DANGER**

Do not mow around overhanging tree branches or bushes at the same height as the operator's torso and head where inadvertent contact may cause injury.

- 4. Remember, for an emergency stop, the forward motion of the tractor can always be stopped by pulling the Forward Speed Control (FSC) into the **NEUTRAL-PARK** position.
- In case the transmission drive belt breaks during operation, and if the machine is on a slope, the machine will freewheel down the slope. To maintain control, immediately (1) Release the steering levers and simultaneously (2) Move the FSC to the NEUTRAL-PARK position. When the machine is stopped or moving slowly, engage the parking brake.

NOTE: This is exactly the same procedure used to normally stop and park the machine.

Disengage the blade clutch and put the FSC in the NEUTRAL-PARK position before starting the engine (an ignition interlock switch normally prevents starting of the machine if these controls are in the **OPERATING** position).

- Do not run the engine in a confined area without adequate ventilation. Exhaust fumes are hazardous and can be deadly.
- Do not carry passengers maximum seating capacity is one (1) person.
- Watch for holes, rocks, and roots in the terrain and for other hidden hazards. When mowing tall grass, mow higher than desired to expose any hidden obstacles. Then, clean the area and mow to the desired height.
- 10. Avoid sudden starts or stops. Before backing the machine up, look to the rear to be sure no one is behind the machine. Watch carefully for traffic when crossing or working near roadways.
- 11. Disengage the blade drive when transporting the machine across drives, sidewalks, etc. Never raise the mower deck while blades are rotating.



#### **⚠** DANGER

Do not mow or dump grass within 5 feet (1.5 meters) of an embankment or retaining wall with drop off.

12. The maximum recommended side slope operating angle is 20 degrees or 33% grade. When operating the machine on a slope, reduce speed and use caution to start, stop, and maneuver. To prevent tipping or loss of control of the machine, avoid sharp turns or sudden changes in direction.

13. Never adjust cutting height with the engine running. Before adjusting cutting height or servicing, disengage the blade clutch (PTO), stop the engine, and remove the ignition key. Wait for all movement to stop before getting off the seat.

**NOTE:** The clutch brake should normally stop drive line rotation within five (5) seconds of disengaging the PTO clutch.

- 14. For side discharge mower decks, do not operate with the grass deflector chute removed. Keep the deflector in the lowest possible position.
- 15. When using the tilt-up deck, observe the following recommendations:
  - a. Do not move tractor with deck in tilt-up position.
  - b. Never tilt body forward with deck in tilt-up position.

#### 16. In case of a clogged or plugged mower deck:

- a. Disengage the blade clutch (PTO) and turn the engine off before leaving the seat.
- b. **LOOK** to make sure blade drive shaft movement has stopped before trying to unclog the system.
- c. Disconnect the spark plug wires.
- Never place hands under the deck use a stick or similar tool to remove clogged material.
- 17. If the cutting blades strike a solid object or the machine begins to vibrate abnormally, immediately disengage the blade clutch (PTO), stop the engine, and wait for all moving parts to stop. To prevent accidental starting, disconnect the spark plug wires. Thoroughly inspect the mower and repair any damage before restarting the engine and operating the mower. Make sure cutter blades are in good condition and blade nuts are torqued to 60 ft-lb (81.3 N·m).
- 18. Do not touch the engine or muffler while the engine is running or immediately after stopping the engine. These areas may be hot enough to cause serious burns.
- 19. When leaving the machine unattended, disengage the blade clutch (PTO), stop the engine, and remove the key.

#### **MAINTENANCE**

- To prevent accidental starting of the engine when servicing or adjusting the machine, remove the key from the ignition switch and disconnect the spark plug wires.
- 2. **To reduce fire hazards,** keep the engine free of grass, leaves, excessive grease, and dirt.
- Keep all nuts, bolts, and screws tight to ensure the machine is in a safe, working condition. Check the blade mounting nuts frequently, making sure they are tight.
- Perform only maintenance instructions described in this manual. Unauthorized maintenance operations or machine modifications may result in unsafe operating conditions.
- 5. If the engine must be running to perform a maintenance adjustment, keep hands, feet, and clothing away from moving parts. **Do not wear jewelry or loose clothing.**
- Always use the proper engine service manual when working on the engine. Unauthorized maintenance operations or modifications to the engine may result in unsafe operating conditions.
- Altering the equipment or engine in any manner which adversely affects its operation, performance, durability, or use will VOID the warranty and may cause hazardous conditions.
- 8. Never attempt to disconnect any safety devices or defeat the purpose of these safety devices.
- Do not change the engine governor settings or overspeed the engine. The governor has been factory-set for maximum-safe engine operating speed.
- Use genuine factory replacement parts. Substitute parts may result in product malfunction and possible injury to the operator and/or others.

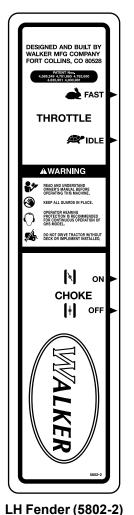
- 11. Use care when charging the battery or performing maintenance on the battery and electrical system:
  - a. Make sure the battery charger is unplugged before connecting or disconnecting cables to the battery.
  - b. Charge the battery in a well-ventilated space, so gases produced while charging can dissipate. Make sure the battery vents in the caps are open.
  - Keep sparks, flames, and smoking materials away from the battery at all times. To avoid sparks, use care when removing battery cables from posts.
  - d. Disconnect both battery cables before unplugging any wiring connectors or making repairs on the electrical system.

**IMPORTANT:** Keep all applicable manuals immediately accessible to anyone who may operate or service this machine.

### SAFETY, CONTROL, AND INSTRUCTION DECALS

Safety, Control, and Instruction Decals are installed on the machine;

if any are missing, illegible, or damaged, a replacement should be ordered and installed before putting the machine into operation. The Decal Part Number is listed below and in the Parts Section.





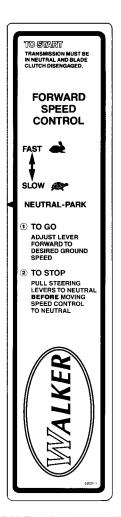
Each End of Mower Deck (5808 All Decks Except DSD56) (5808-1 DSD56 Deck)



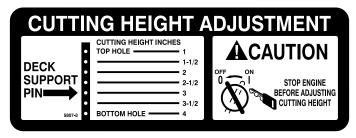
SD Deck Discharge Shield (5848)



Rear Body, Above Muffler (5805)



RH Fender (5802-1)



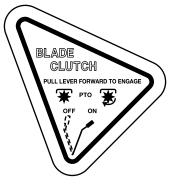
**Deck Gearbox Cover (5807-3)** 



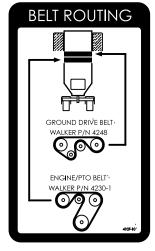
Flex Coupling Guard, Both Sides (4107-1)

### SAFETY, CONTROL, AND INSTRUCTION DECALS

Safety, Control, and Instruction Decals are installed on the machine; if any are missing, illegible, or damaged, a replacement should be ordered and installed before putting the machine into operation. The Decal Part Number is listed below and in the Parts Section.



Blade Clutch on Front Body Adjacent to RH Steering Lever (4107-6)



**Belt Routing (4107-10)** 



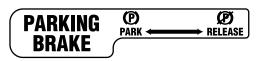
**Deck Carrier Frame (8647)** 



Center Body Behind Transaxles (9804)



**Deck Carrier Frame (8653)** 



Parking Brake (4406-8)

# TIGHTEN BLADE MOUNTING NUTS TO 60 FT-LBS. DO NOT UNDERTORQUE OR OVERTORQUE FOR PROPER SHOCK LOAD PROTECTION. USE TORQUE WRENCH. S865.

**Deck Carrier Frame (5865)** 

IMPORTANT - ENGINE COOLING SYSTEM MAINTENANCE
CHECK AND CLEAN ENGINE ROTATING INLET SCREEN AND STATIC SCREEN
GUARD DAILY (EVERY 8 HOURS) OR MORE OFTEN IN DIRTY CONDITIONS.
CYLINDER HEAD COOLING FINS SHOULD BE CHECKED AND CLEANED
BY REMOVING ENGINE SHROUD EVERY 100 HOURS.

Engine Shroud (5855) (Model MBK only)

#### SETUP INSTRUCTIONS

Walker Mowers are shipped partially assembled to our distribution network, and are typically assembled by the selling dealer. For any additional assembly besides the following, contact your Walker dealer.

#### **Battery Service**

The battery is a completely sealed, non serviceable battery.



#### **Battery Location**

**IMPORTANT:** Make sure battery is securely mounted in the frame. A loose battery may cause damage to the case resulting in acid leakage and severe damage to the machine. A hazard may be created by damage to critical working parts and safety systems.

#### **Mower Deck Assembly**

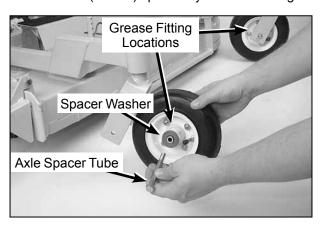
Deck Caster Wheels Installation

 Remove the bolt, nut, axle spacer tube, and spacer washers from each deck caster wheel fork.

**NOTE:** Spacer washers are used only when the optional semi-pneumatic deck wheels (8.25 x 2.75) are installed.

- Fit the axle spacer tube through the wheel hub, position the spacer washer on each side of the hub (if used), and fit the assembly into the wheel fork.
- 3. Insert the 3/8-16 x 4-1/2 in. bolt through the wheel fork with the bolt head to the outside and install the 3/8-16 in. Keps nut.

 Tighten the bolt and nut until the axle spacer tube bottoms against the inside of the wheel fork (will not turn) while the wheel and spacer washers (if used) spin freely without binding.



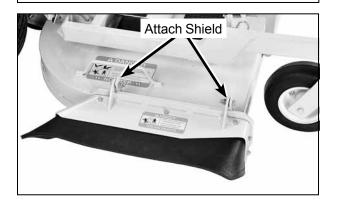
**Deck Caster Wheel Installation** 

Deck Discharge Chute Installation (Side Discharge Models Only)

Attach the deck side discharge shield by positioning the shield hinge lug in front of the deck mount and fastening with two 3/8-16 x 1-1/4 in. bolts, 3/8-16 ESNA nuts, and 3/8 in. wave spring washers. The wave washers fit between the two hinging surfaces. Tighten the nuts until the shield moves freely but is not loose.



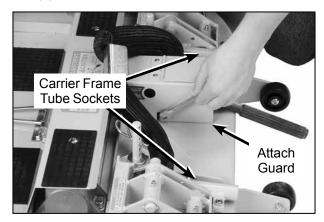
DO NOT operate the machine without the grass deflector chute attached and in the lowest possible position.



**Deck Discharge Shield Installation** 

#### PTO Shaft Guard Installation

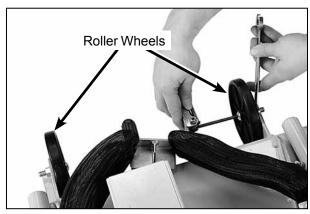
Position the shaft guard as shown and mount with two (2) 1/4-20 x 1/2 in. bolts.



**PTO Shaft Guard Installation** 

#### Tilt-Up Roller Wheel Installation

Mount the two (2) tilt-up roller wheels on the brackets on the rear skirt of the deck housing using the P/N 8490 axle bolt, 3/8 in. wave spring washer and 3/8-16 in. Whiz locknut. Tighten the axle bolt until the wheel rolls freely, but is not loose.



**Roller Wheel Installation** 

#### **Mower Deck Installation on Tractor**

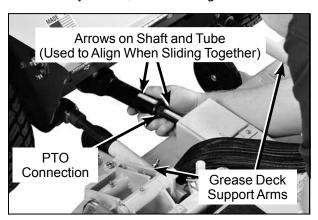
Deck Installation - Model MBV

 Lightly grease each deck support arm (2) on the tractor. Refer to **Mower Deck Installation** photo for location of deck support arm.



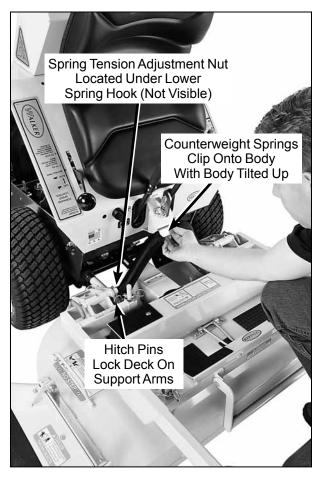
#### **Mower Deck Installation**

- Engage the deck carrier frame tube sockets on the tractor support arms (refer to PTO Shaft Guard Installation photo for socket location). Slide the deck onto the support arms approximately 3 in. (76 mm).
- Align and connect the splined PTO shaft and socket halves, as shown in PTO Shaft Connection photo. The PTO shaft has a pilot end to ease alignment of shaft; fit shaft end into socket and rotate shaft until the splines line up as indicated by arrows, then slide together.



**PTO Shaft Connection** 

 Install the hitch pin through the hole on the end of each support arm to lock the deck in place (refer to **Deck Counterweight Spring Installation** photo). Two (2) hitch pins are included in the owner's packet of materials.

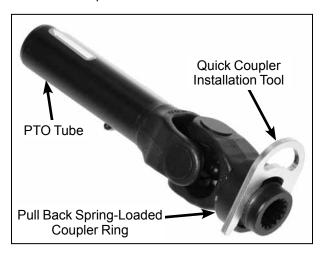


**Deck Counterweight Spring Installation** 

- Raise mower body (instead of lifting the front of deck) and clip the counterweight springs to the receptacle on front of body. Lower the body to tension the springs. (Refer to **Deck Counter-weight Spring Installation** photo.)
- 6. With the counterweight springs connected, the weight on the deck caster wheels should be 15 to 25 lb (6.8 to 11.3 kg); this adjustment is preset at the factory. If required, the spring tension can be adjusted by tightening or loosening the elastic stop nuts located underneath the lower spring hook, or contact your local dealer if additional help is required. Refer to Deck Counterweight Spring Installation photo.

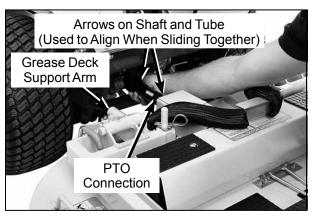
#### Deck Installation - Model MBK

- Lightly grease each deck support arm (2) on the tractor. Refer to **Mower Deck Installation** photo for location of deck support arm.
- Engage the deck carrier frame tube sockets on the tractor support arms (refer to PTO Shaft Guard Installation photo for socket location), slide the deck onto the support arms approximately 3 in. (76 mm).
- Retract spring-loaded coupler ring on the PTO Tube (provided in owner's packet) and insert coupler tool. Refer to Quick Coupler Installation Tool photo.



**Quick Coupler Installation Tool** 

 Reaching under the tractor, join the PTO tube to the PTO shaft (align arrow decals). Slide the PTO tube onto the spline shaft on the tractor PTO gearbox.



Mower Deck Installation (PTO Shaft Connection)

- Slide the deck the rest of the way on the deck arms.
- Install the hitch pin through the hole on the end of each support arm to lock the deck in place (refer to **Deck Counterweight Spring Installation** photo). Two (2) hitch pins are included in the owner's packet of materials.
- Remove Installation Tool from coupler ring and make sure the ring has "snapped" securely on the spline shaft.

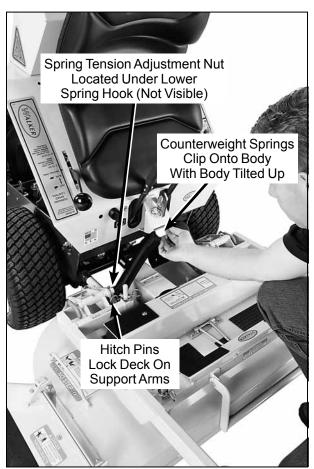
**IMPORTANT: DO NOT** operate tractor with Quick Coupler Installation Tool installed.

**IMPORTANT:** To prevent damage to the mower, make sure the PTO shaft assembly is securely locked on the tractor, with the locking balls fully seated in the groove and the ring in the full forward position (refer to the **Coupler Ring** "**Locked" Position** photo). After installation, pull on the shaft to check for security.



**Coupler Ring "Locked" Position** 

- Raise the mower body (instead of lifting the front of deck) and clip the counterweight springs to the receptacle on front of body. Lower the body to tension the springs. (Refer to Deck Counterweight Spring Installation photo.)
- 9. With the counterweight springs connected, the weight on the deck caster wheels should be 15 to 25 lb (6.8 to 11.3 kg); this adjustment is preset at the factory. If required, the spring tension can be adjusted by tightening or loosening the elastic stop nuts located underneath the lower spring hook, or contact your local dealer if additional help is required. Refer to Deck Counterweight Spring Installation photo.



**Deck Counterweight Spring Installation** 

#### Deck Leveling

 Position mower on a smooth, level surface. Set the cutting height to the highest position - 4 in. (102 mm) - for easy access under the deck to measure blade height. Refer to ADJUSTING CUTTING HEIGHT in Operating Instructions.

**NOTE:** A block of wood cut **4 in. (102 mm)** high is a convenient gauge to measure blade height above ground during the leveling process.

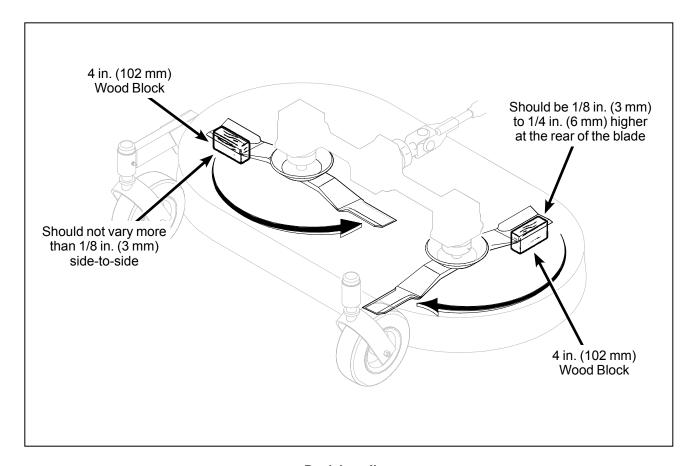


#### **WARNING**

The machine must be shut off during this procedure.

- Check the side-to-side level. Rotate each blade sideways and measure the distance from blade tip to ground on each side. If measurements vary more than 1/8 in. (3 mm), add a washer shim under the deck support pins on the low side to level the deck.
- 3. Check the front-to-rear level. Rotate the blades to point forward. Measure the distance from blade tip to ground on the front and rear. The rear of the blade should be 1/8 to 1/4 in. (3 to 6 mm) higher than the front of the blade; shim the rear (or front) deck support pins equally to achieve at least 1/8 in. (3 mm) difference.

**NOTE:** The mower deck and support frame are jig welded; within normal tolerances, very little, if any, shimming should be required to level the deck. Tire pressure will influence the levelness of the deck. Check the tire pressure as a possible cause of the deck not being level.



**Deck Leveling** 

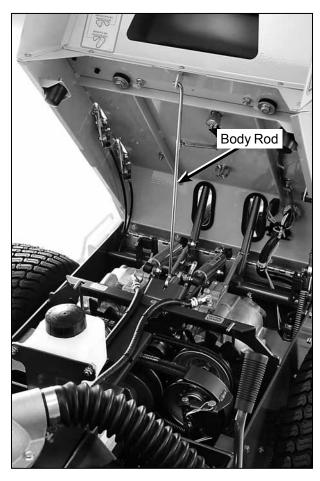
#### PREOPERATING CHECKLIST

Before operating the mower for the first time, and as a routine before daily operations, it is important to make sure the mower is properly prepared and ready for operation. The following is a list of items to be checked. (For a mower with frequent operation, some of these items will not need to be checked every day, but the operator should be aware of the condition of each.)

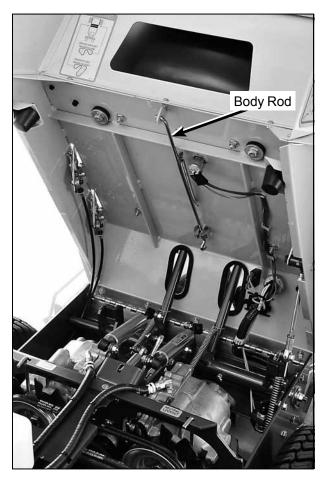
For proper fuel and lubricants refer to Specifications.

CHECK BODY ROD IN STOWED POSITION

Check that body rod is secured in the stowed position before lowering body. Refer to **Body Rod in Stowed Position** photo.



**Body Rod in Engaged Position** 



**Body Rod in Stowed Position** 

FILL FUEL TANK

Fill the fuel tank using clean, fresh automotive grade **unleaded** gasoline (87 octane rating minimum).

#### **⋒** DANGER

Handle gasoline with care. Gasoline is highly flammable and its vapors are explosive. Use safe refueling procedures:

- DO NOT fill fuel tank with the engine running.
- If the engine is hot, allow to cool before refueling.
- Use an approved fuel container.
- Fuel the mower outdoors.
- DO NOT smoke while refueling.
- Avoid spilling fuel; use a funnel or spout.
- DO NOT overfill the fuel tank; fill up to about 1 in. (25 mm) below the top of tank.

**IMPORTANT: DO NOT** permit dirt or other foreign matter to enter the fuel tank. Wipe dirt from around the filler cap before removing. Use a clean fuel storage container and funnel.

**IMPORTANT: DO NOT mix oil with gasoline.** Always use fresh, automotive grade unleaded gasoline. **DO NOT** use premium, white, or high-test gasoline. **DO NOT** use additives, such as carburetor cleaners, deicers, or moisture removing agents. **DO NOT** use gasoline blended with methyl alcohol.

CHECK ENGINE CRANKCASE OIL LEVEL

Check the engine crankcase oil level before use and after each 8 hours of continuous operation. Refer to LUBRICATION for *Checking Engine Crankcase Oil Level* in Maintenance Instructions.

- CHECK AND SERVICE ENGINE AIR CLEAN-ER SYSTEM
- Check air restriction gauge to make sure there is no red indication showing.
- Check condition, cleanliness, and security of the complete air cleaner system (inspect air filter every 100 hours). For detailed procedures, refer to CLEANING the Engine Air Cleaner System in Maintenance Instructions.

☐ CHECK ENGINE COOLING SYSTEM
Check that the engine cooling air intake screen is free of obstruction by grass clippings or debris and clean if required. Also, cylinder head cooling fins should be inspected and cleaned if any build-up of debris is noted. Contact your Walker dealer to perform this procedure.
CHECK SECURITY OF DRIVE TIRE MOUNTING NUTS

The eight (8) Drive Tire mounting nuts should each be torqued to 75 to 85 ft-lbs. (101.7 to 115.2  $N \cdot m$ ).

☐ INSPECT THREE (3) DRIVE BELTS

Engine/PTO and Ground Drive.

CHECK HYDROSTATIC TRANSAXLE OIL LEVEL

Refer to LUBRICATION for Transaxle Lubrication in Maintenance Instructions.

CHECK TIRE PRESSURE

Deck Caster Wheel = 20 PSI (137 kPa)

Drive = 15 PSI (103 kPa) Rear = 20 PSI (137 kPa)

CHECK AND CLEAN GRASS BUILDUP UN-DERNEATH MOWER DECK

Refer to **CLEANING** in **Maintenance Instructions** for deck cleaning information.



#### DANGER

Never operate cutter blades with deck in raised position because it is hazardous.

The tilt-up deck can be secured in the raised position by unlocking the deck lock levers on each side of the carrier frame and inserting the deck hook into the tilt-up latch on the tractor body. Before operating the tractor, make sure to re-engage the deck lock levers after lowering the deck to the normal operating position.



**Deck Secured in TILT-UP Position** 



### **A** CAUTION

Do not operate machine with deck tilt-up pivot joint unlocked.



### **A** DANGER

Do not operate the mower with deck in tiltup position. Do not move the tractor with the deck in the tilt-up position.

CHECK MOWER BLADE CONDITION, SHARPNESS, AND SECURITY OF MOUNT- ING
The blade mounting nut should be tightened to 60 ft-lb (81.3 N·m). If blade sharpening is required, refer to CHECKING/SERVICING for Sharpen Mower Blades in Maintenance Instructions.
ADJUST MOWER CUTTING HEIGHT, IF REQUIRED
Position the hitch pins in the four deck support pins. Refer to the "Cutting Height Adjustment" decal on the deck gearbox cover.
PERFORM ANY ADDITIONAL PROCEDURES called for on the MAINTENANCE SCHEDULE CHART in Maintenance Instructions.

#### **CONTROL IDENTIFICATION, LOCATION, AND FUNCTION**

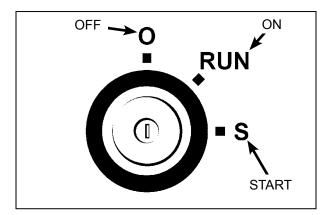
### **A** CAUTION

Before operating the mower, become familiar with the location and function of all operator controls. Knowing the location, function, and operation of these controls is important for safe and efficient operation of the mower.

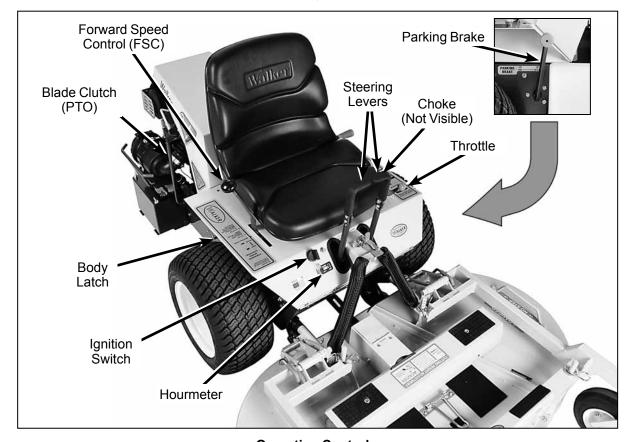
#### **Ignition Switch**

The ignition switch is located on the right front of the body and is used to start and stop the engine. The switch has three positions: "O" is the OFF position, **RUN** is the position the key returns to after starting, and "S" is the START position. When starting the engine, turn the key clockwise to the "S" position. Do not hold the key in the "S" position longer than 10 seconds. If the engine does not start, return the key to the "O" position for at least 60 seconds before

making a restart attempt. Prolonged cranking can damage the starter motor and shorten battery life. Release the key when the engine starts, and it will return to the **RUN** position. To stop the engine, rotate the key counterclockwise to the "O" position.



**Ignition Switch** 



**Operating Controls** 

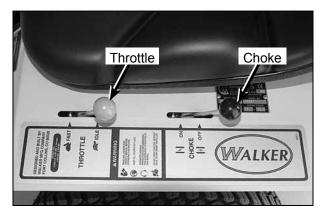
#### **Engine Choke**

The choke control lever (black knob) is located on the left side of the seat. To start a cold engine, move the choke control forward to the **ON** position. After engine starts, move the choke control toward the **OFF** position, keeping enough choke to allow the engine to run smoothly as it warms up. As soon as possible, move the choke to the **OFF** position. A warm engine requires little or no choke for starting.

**IMPORTANT:** Make sure the choke is in the **OFF** position during normal engine operation; running with the choke in the **ON** position **CAN** damage the engine.

#### **Engine Throttle**

The throttle control lever (red knob) is located on the left side of the seat and is used to control engine speed. Moving the lever **forward** toward the **FAST** position **increases** engine speed; moving it **backward** toward the **IDLE** position **decreases** engine speed.



**Choke and Throttle Location** 

#### Forward Speed Control (FSC)

Forward Speed Control (FSC) has two functions: One is to set forward travel speed, and the other is to establish the **NEUTRAL-PARK** position. When the FSC lever is moved into the FORWARD position, a friction lock holds any forward speed setting from 0 to 8 mph (0 to 12.9 km/h). The ground speed is proportional to the lever position; the further the lever is advanced forward, the faster the tractor moves. It is not necessary to hold the FSC in position since the friction lock maintains the selected lever position. Pulling back on the steering levers overrides the FSC setting and slows or stops forward travel. Releasing the steering levers allows the tractor to resume forward travel at the speed set by the FSC lever. To stop and park the machine, the FSC lever is moved backward to the NEUTRAL-PARK position.

#### **Steering Levers**

Each drive wheel is controlled by its own independent steering lever, for both steering function and **FORWARD/REVERSE** motion. The FSC lever sets the maximum forward speed, and also sets the forward position of the steering levers. The steering levers operate **only with a backward pulling** movement of the lever, which causes the drive wheel for that lever to first slow down, stop, and then reverse with a full backward lever stroke. The levers are released to the **FORWARD** position for "straight-ahead" ground travel.

**NOTE:** Pushing forward on the steering levers will not cause **any** change in tractor motion - there will be no steering lever reaction and there will be no machine damage.

#### **Blade Clutch (PTO)**

The blade clutch lever has two positions. Pushing the lever **DOWN engages** the PTO that drives the mower blades. Pulling the lever **UP disengages** the PTO and engages the blade brake.

#### **Parking Brake**

The parking brake functions by locking a detent arm into the transaxle outer control gear teeth. Moving the lever **FORWARD engages** the parking brake; moving the lever **BACKWARD releases** the brake.

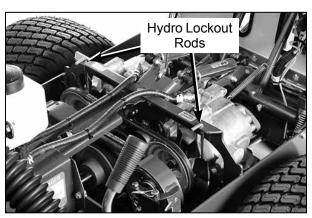
**IMPORTANT:** Stop the tractor completely before engaging the parking brake The parking brake uses a positive mechanical lock similar to the **PARK** position on an automotive automatic transmission. If the tractor is moving when the brake is engaged, it will result in sudden stoppage and possible internal damage to the transaxle.

**NOTE:** If pressure on the parking brake pin (e.g., parked on a hill) makes it impossible to release the parking brake with the parking brake lever, move the mower gently forward or backward to allow the brake detent to set into the teeth.

#### **Transaxle Lockout Rods**

The transaxle lockout rods disengage the transaxles. By lifting the rods up and locking them into place with the shoulder on the rod in the chassis notch, the transaxles are released to permit freewheeling. By releasing the rods and recessing them back toward the chassis, the transaxles are engaged for normal operation. The transaxle rods in the **LOCKOUT** position are used to enable moving the machine without the engine running (e.g., for service). Refer to **TRANSAXLE LOCKOUTS** in this section for operating instructions.

**NOTE:** The transaxle lockout rods ends should be completely retracted against the body, otherwise operation of the transaxle may be erratic.



**Hydro Lockout Rod Location** 

#### Hourmeter

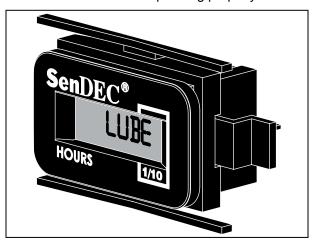
The hourmeter, which is located on the right front of the body, displays **operating time** accumulated while the ignition switch is in the **ON** position.

The hourmeter provides maintenance reminders after certain hours of operation. The hourmeter screen will start flashing the reminder one hour prior to the recommended interval and will continue until one hour after the recommended interval (two hours). The hourmeter does not have a manual reset function.

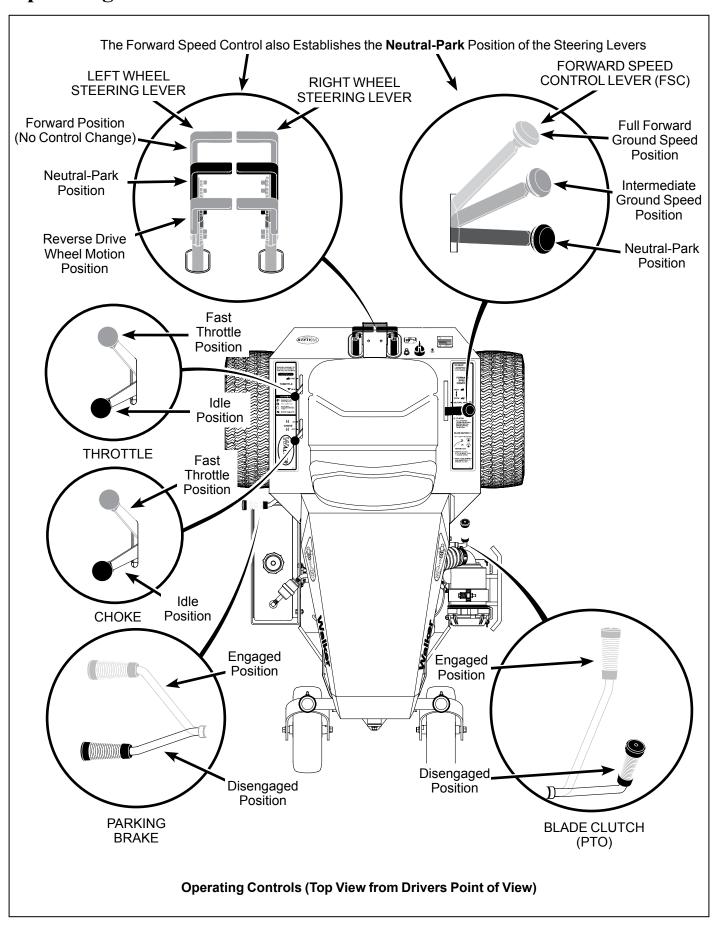
Procedure	Interval*	Reminder	
Oil Change (Break-In)**	4-6 Hours	ОНО	OIL
Lubricate and Check Levels	24-26 Hours	LUBE	
Oil Change	49-51 Hours***	CHG	OIL

- \* These intervals reflect the actual time that the reminder will flash (one hour prior to and one hour after the recommended interval).
- \*\* This reminder is only used one time.
- \*\*\* In normal operating conditions, oil changes in 100-hour intervals are acceptable. Walker and the engine manufacturers recommend engine oil changes every 50 hours in extremely dirty or dusty conditions or for units with less than 100 hours annual use.

**NOTE:** The blinking hour glass on the display means that the meter is operating properly.



Hourmeter



#### STARTING THE ENGINE



### **CAUTION**

Before operating the mower, read and understand all Safety Instructions and Operating Instructions.



#### WARNING

NEVER run the engine in an enclosed or poorly ventilated area. Engine exhaust contains carbon monoxide, an odorless and deadly gas.

1. Before attempting to start the engine, make sure the operator is in the seat, the Forward Speed Control is in **NEUTRAL-PARK** position. and the blade clutch and parking brake are DIS-ENGAGED.

**NOTE:** Release parking brake to prevent extra load on the starter if the transmission neutral is slightly out of adjustment.



### **CAUTION**

A safety interlock switch system PRE-**VENTS CRANKING** the engine with either the Forward Speed Control or the blade clutch (PTO) out of neutral. If the engine cranks otherwise, the safety system is not working and should be repaired or adjusted before operating the mower. DO NOT disconnect safety switches; they are for the operator's protection.

Move the choke lever to the **ON** position and move the throttle 1/4 to 1/2 open (toward FAST). Turn the ignition switch to the START position to start the engine. Release the key to RUN position as soon as the engine starts.

**NOTE:** The choke may not be required if the engine is warm.

**IMPORTANT: DO NOT** crank the engine continuously for more than 10 seconds at a time. If the engine does not start, turn the key to the **OFF** position and allow a 60 second cool-down period between starting attempts. Failure to follow these guidelines can damage the starter motor and shorten battery life. Contact your Walker dealer or authorized engine dealer for additional help.

After the engine starts, gradually move the choke to the OFF position, keeping enough choke on to allow the engine to run smoothly as it warms up. As soon as possible, move the choke to the **OFF** position.

**IMPORTANT:** Make sure the choke is in the **OFF** position during normal engine operation: running with the choke in the ON position CAN damage the engine.

#### ADJUSTING GROUND SPEED AND STEERING



#### CAUTION

Learn to START, STOP, and MANEUVER the mower in a large, open area.

If the operator has not operated a machine with LEVER STEERING OR DUAL TRANS-AXLES, steering and ground operation should be learned and practiced until the operator is completely comfortable handling the machine BEFORE ATTEMPTING TO MOW.



#### **DANGER**

Keep feet on footrests at all times when the machine is moving. Never operate the tractor without a deck or implement installed.

#### **Beginning Recommendations are:**

- ♦ Learn operation of the mower in an open area away from buildings, fences, and obstructions. Learn operation on flat ground BEFORE operating on slopes.
- ♦ Start maneuvering the mower with SLOW engine speed and SLOW Forward Speed Control setting until familiar with all operating characteristics.
- ◆ Remember it is not necessary to hold the steering levers forward (a unique Walker feature); always PULL on the levers for steering or for reverse motion of the mower.
- ♦ Learn to operate the mower with your left hand on the steering levers and right hand on Forward Speed Control. The use of two hands on the steering levers tends to cause overcontrol.
- ♦ Learn to operate the steering levers with smooth action. Jerky movements are hard on the transmission and lawn. For sharp turns, do not allow the inside wheel to stop and twist on the grass. Pull the steering lever controlling the inside wheel into reverse for a smooth "rolling" turn (one wheel rolling forward while the other rolls backward).
- ♦ Practice maneuvering the mower until you can make it go exactly where you are aiming.
- Remember, for an emergency stop, or in case of loss of control, machine movement can always be stopped quickly by pulling the Forward Speed Control into the NEUTRAL-PARK position.
- Move the FSC out of NEUTRAL-PARK position to the desired forward speed. DO NOT hold forward on steering levers. It is not necessary to hold the FSC lever in position since a friction lock maintains the selected lever position (and forward travel speed).

### **MARNING**

In case either of the transmission drive belts break during operation, and if the machine is on a slope, the machine will freewheel down the slope. To maintain control, immediately (1) Release the steering levers and simultaneously (2) Move the FSC to the NEUTRAL-PARK position. When the machine is stopped or moving slowly, engage the parking brake.

**NOTE:** This is exactly the same procedure used to normally stop and park the machine.

**NOTE:** If the FSC lever will not stay in the selected position, the friction lock needs to be adjusted. Contact your Walker dealer.

 Steer by pulling the lever on the side of desired direction of turn, e.g., pull the LH lever to turn left. To minimize the possibility of overcontrol, use only one hand on both steering levers.



**Correct Operator Hand Position on the Controls** 

Reverse direction of the mower by pulling both levers backward.

**NOTE:** Smooth action on the steering levers will produce smooth mower operation. Remember to keep the engine and ground speed slow until learning the control response.

- 4. The FSC may be adjusted forward for faster ground speed and backward for slower ground speed. When mowing, ground speed should be adjusted to match the load on the cutter blades, i.e., as the engine pulls down in heavy cutting, pull back on the FSC lever to reduce ground speed. Adjusting ground speed helps maintain a balance between engine power and blade speed for high-quality cutting action.
- Stop ground travel by pulling both steering levers backward to the NEUTRAL-PARK position (tractor not moving) and then moving the FSC lever to the NEUTRAL-PARK position.

**NOTE:** If the tractor creeps forward or backward with the FSC lever in the **NEUTRAL-PARK** position, the transmission control needs to be adjusted. Refer to **ADJUSTMENTS** of **Transmission Control** in **Maintenance Instructions**.

#### **ENGAGING THE MOWER**

- Set the engine throttle at about 1/3 speed. Do not attempt to engage the blade clutch at high engine speeds. This will drastically shorten drive belt life. Use only moderate engine speed when engaging the blade clutch.
- 2. Push the blade clutch lever **SLOWLY** forward to engage the mower blades.

### **▲** CAUTION

A safety interlock switch (seat switch) will cause the engine to stop if the blade clutch is engaged and the operator is not in the seat. The function of this switch should be checked by the operator raising off the seat and engaging the blade clutch; the engine should stop. If the switch is not working, it should be repaired or replaced before operating the mower. DO NOT disconnect the safety switches; they are for the operator's protection.

**IMPORTANT: DO NOT** engage the blade clutch when transporting the mower across drives, sidewalks, loose materials, etc. **DO NOT engage the blade clutch with the PTO shaft disconnected** (the mower deck removed from tractor).



**Blade Clutch Engaged** 



**Blade Clutch Disengaged** 

## CAUTION

If the cutting blades strike a stationary object while mowing, stop the mower immediately, disconnect the spark plug wires, lift the deck, and inspect the deck and blades thoroughly for damage. Make sure that the blade timing has not been disturbed (the blades should be at 90 degrees to each other). Refer to REPLACING/REPAIRING the Blade Overload Shear Bolts in Maintenance Instructions if blades are out of time. Also, make sure the blade retaining nuts are torqued to 60 ft-lb (81.3 N·m).

#### STOPPING THE MACHINE

- Pull the steering levers to the **NEUTRAL-PARK** position and then move the FSC lever backward to the **NEUTRAL-PARK** position.
- 2. Slow the engine to idle; put the throttle in the **IDLE** position.
- 3. Disengage the blade clutch.

**IMPORTANT: DO NOT** disengage the blade clutch with high engine speed (above 1/2 throttle) since the brake action on the blade drive will cause premature wear of the brake band.



## **₩ARNING**

A brake stops the cutter blades from freewheeling within five (5) seconds after disengaging the clutch. If the brake system malfunctions and the blades do not stop within five (5) seconds, the brake should be repaired or replaced before operating the mower. Contact your Walker dealer.

4. Turn the ignition switch **OFF.** 



### **WARNING**

Remove the key from the ignition switch when leaving the mower unattended. This will prevent children and inexperienced operators from starting the engine.

Engage the parking brake. Also, engaging the parking brake is recommended when stopping or parking the machine in a confined space with little tolerance for movement.

**IMPORTANT:** The hydrostatic transaxles lock to prevent the mower from rolling freely with the engine stopped. However, if the mower is parked on a slope, it is necessary to **ENGAGE** the parking **BRAKE** to prevent the mower from creeping. This is due to a small amount of slippage in the transaxles, especially when transmission fluid is warm.

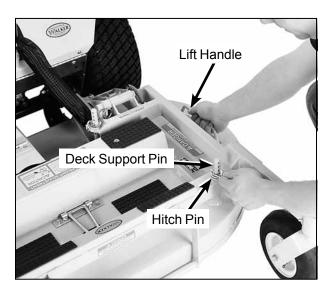
#### ADJUSTING CUTTING HEIGHT



## **WARNING**

The engine must be stopped before adjusting cutting height. Disengage the blade clutch (PTO), stop the engine, and remove the ignition key. Wait for all movement to stop before getting off the seat.

Cutting height is adjusted by positioning the four retainer hitch pins in a series of seven vertical holes on the deck support pins. Lift handles have been provided on each end of the deck to assist in raising the deck while positioning the hitch pins. Cutting heights range from 1 in. (25 mm) [top holes] to 4 in. (102 mm) [bottom holes] in 1/2 in. (13 mm) increments.



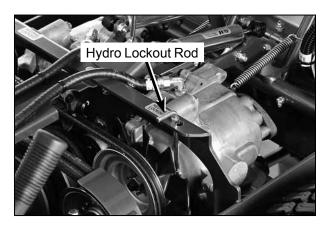
**Cutting Height Adjustment** 

#### TRANSAXLE LOCKOUTS

**IMPORTANT: DO NOT TOW** this mower with the transmission lockout engaged. Towing can produce excessive internal pressure and damage the transaxle.

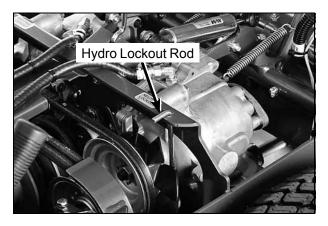
To move the mower with the engine **NOT** running (dead battery, maintenance, etc.), the transaxles are unlocked (released).

- 1. Raise the body.
- Pull up the transaxle lockout rods on both the RH and LH transaxles and secure into place by shouldering both rods in the chassis notch area.
- The mower will "freewheel" with the rods in the LOCKOUT position. The levers must be in the highest position to completely unlock the transmissions.



**Hydro Lockout Rod - Freewheel Position** 

After moving the mower, release the rods, placing them in the normal **OPERATING** position.
 The transmission rod ends should be completely retracted against the chassis, otherwise operation of the transmission maybe erratic.

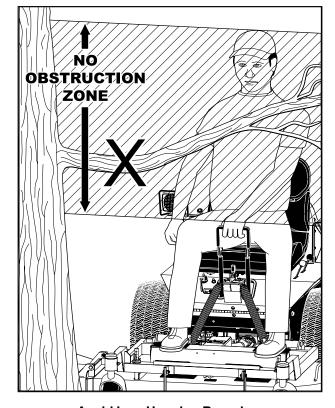


**Hydro Lockout Rod - Normal Operating Position** 

#### RECOMMENDATIONS FOR MOWING



Do not mow around overhanging tree branches or bushes at the same height as the operator's torso and head where inadvertent contact may cause injury.



**Avoid Low Hanging Branches** 

**IMPORTANT:** Operate the engine at **full throttle** when mowing, to allow the engine to produce full horsepower and to increase efficiency of the engine cooling system.

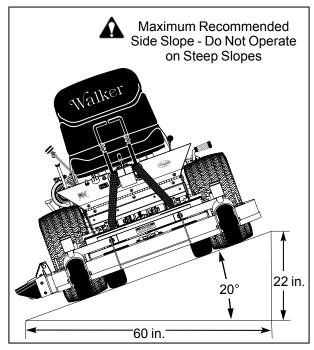
- Keep the mower deck and discharge chute clean.
- Mow with **sharp blades**. A dull blade tears the grass (resulting in poor lawn appearance) and uses extra power (slowing the mowing speed).
- It is preferable to cut grass when it is **dry** and **not too tall**. Mow frequently and do not cut grass too short. (For best appearance, cut off 1/3 or less of existing grass height.)
- When mowing, operate the engine at or near **full throttle** for the best cutting action. Mowing with a lower engine RPM causes the mowing blade to not cut clean and tear the grass. The engine is **designed to be operated at full speed.**
- When mowing in adverse conditions (tall and/or wet grass), mow the grass twice. Raise the mower to the highest setting 4 in. (102 mm) for the first pass and then make a second pass cutting to the desired height.
- Use a slow setting on the FSC for trimming operations.
- Make sure the mower is **leveled properly** for a smooth cut. Refer to *Deck Leveling* in **Assembly Instructions.**
- Use an alternating **stripe mowing pattern** for **best appearance** and vary the direction of the stripe each time the grass is mowed to avoid wear patterns in the grass.
- Avoid damage to the grass by slipping and skidding of the drive tires. Use **smooth control movements** of the steering levers since the transaxles are "power boosted controls" and jerking the levers can easily slip the tires. For sharp turns, do not allow the inside wheel to stop and twist on grass; pull inside steering lever into reverse for a smooth "rolling" turn (one wheel rolling forward while the other rolls backward).

• When using a side discharge mower deck, the side discharge shield **must not be removed** and must be kept in the lowest possible position to deflect grass clippings and thrown objects downward. Orient the side discharge away from sidewalks or streets to minimize cleanup of clippings. When mowing close to obstacles, orient the side discharge away from obstacles to reduce the chance of damage to property by thrown objects.



Side Discharge Shield in Lowest Position

 When operating on a slope, reduce speed and use caution to start, stop, and maneuver. Avoid sharp turns or sudden changes in direction. The maximum recommended side slope operating angle is 20 degrees or 33% grade.



**Maximum Recommended Side Slope** 



#### **DANGER**

Do not mow or dump grass within 5 feet (1.5 meters) of an embankment or retaining wall with drop off.

## RECOMMENDATIONS FOR TILT-UP DECK OPERATION/TRANSPORT

To avoid potential deck and/or tractor damage while using the tilt-up deck, the following recommendations are offered:

- **Do not move the tractor** with the deck in the tiltup position since both the roller wheels (on the back of the deck) may be damaged by moving the tractor. The tilt-up configuration should only be used when the tractor is parked.
- The tractor body should never be tilted forward with the deck in the tilt-up position. This can cause the deck to unhook from the tractor and fall with considerable force, potentially causing deck or tractor damage and/or bodily injury.
- When transporting a tractor with the deck in the tilt-up position (on a truck or trailer), the **deck should be secured** to the vehicle with a strap or rope (stop vertical movement). This will prevent the deck from bouncing on the rear roller wheels (causing breakage). This will also prevent the deck from unhooking from the tractor and falling, potentially causing deck or tractor damage. Damage to other items parked in front of the deck may also occur.



No Driving Zone

## **Maintenance Instructions**



Maintenance procedures requiring special training or tools should be performed by a trained technician.

MAINTENANCE SCHEDULE CHART - RECOMMENDED SERVICE INTERVALS - MODEL MBV AND MODEL MBK									
Service Item	Daily	25 Hours	50 Hours	100 Hours	200 Hours	400 Hours	Yearly	Every 2 Years	Ref. Page
Check Engine Crankcase Oil Level	х								40
Check/Clean Engine Air Cooling System*	х								47
Clean Grass Buildup Under Deck	х								51
Service Mower Blades	х								53
Check Security of Air Cleaner System	х								53
Check Air Filter Restriction Gauge	х								49
Lubricate Grease Fittings and Oil Points*		х							43
Check Transaxle Fluid		х							46
Check Tire Pressure		х							53
Check Drive Belts (Engine/PTO, Ground Drive)		х							55
Check Deck Gearbox Oil Seals		х							55
Check Safety Switch System		х							56
Change Engine Crankcase Oil** (MBV)			х						40
Change Engine Oil Filter (MBV)				х					40
Check Security of Drive Tire Mounting Nuts (75 to 85 ft-lbs.)				х					53
Clean Transaxle Cooling Fins				х					52
Check Blade Brake Action				x					55
Clean Engine Cooling Fins				х					48
Check Air Filter Element <sup>△</sup>				x					49
Check/Regap Spark Plugs				х					55
Change Engine Crankcase Oil** (MBK)				х					42
Change Engine Oil Filter (MBK)					х				42
Change Transaxle Oil and Filter						х			46
Replace Fuel Filter							х		60
Check FSC Friction Lock							х		56
Check Fuel Lines and Clamps							х		55
Replace Air Filter Element, and Dust Ejection Valve <sup>△</sup>							х		50
Service Solenoid Shift Starter (MBK)							х		55
Check PTO U-Joints for Wear/Looseness							х		55
Service Battery							х		53
Replace Fuel Lines and Clamps								х	55

- More often in extremely dusty or dirty conditions
- Change engine oil and filter after first 5-8 hours of operation of a new engine (break-in period)
- See your Walker dealer for this service or refer to the Walker Service Manual
  - Air cleaner is remote mounted Cummins/Fleetguard OptiAir™ unit, replace filter every year



## **A** CAUTION

When performing maintenance with the mower body raised, a safety prop should be installed from back of body to chassis frame (fail-safe protection in case of failure of body lift support).

## IMPORTANT TIPS FOR CARE OF THE BRIGGS & STRATTON ENGINE - MODEL MBV

### **Fuel System**

- Fuel must be clean free from water, dirt, and organic material.
- Clean the fuel filter on a regular basis and when contamination is suspected or found in the fuel.

## Starting/Stopping

- Start engine with the throttle advanced off idle (1/4 to 1/2 throttle). This will aid starting, especially in cold weather.
- Keep the battery fully charged.
- Match crankcase oil viscosity to the ambient temperature, allowing the engine to crank faster and start easier.
- Allow engine to run at idle for a few seconds before stopping engine to avoid run-on or backfiring.

### **Cooling System**



## CAUTION

DO NOT use a pressure washer to clean the cooling system on an air-cooled engine, mud may form under the cooling shroud on the cylinder head and cooling fan.

- Keep engine air intake screen and cylinder head fins free of grass clippings, chaff, and dirt. Inspect intake screen and cooling fins for cleanliness and damage.
- Check performance of the cooling system by starting the engine, holding a hand adjacent to the cylinder head, and feeling the cooling airflow.



### **DANGER**

Make sure to keep hands clear of exhaust pipe, muffler, and moving parts when checking airflow.

• Operate the engine at full speed when mowing. This will allow the engine to produce full horsepower and move more cooling air through the engine cooling fins.

## **Air Cleaner System**

- Use **only** Cummins/Fleetguard air cleaner elements. Aftermarket elements may not seal in the air cleaner housing, allowing dirt to enter the engine. Also, aftermarket filters often skimp on the filtration media and require more frequent replacement (see following instructions).
- Use the air flow restriction gauge to indicate the need to service the air filter.
- DO NOT overservice or frequently "disturb" the air filter. A dirty air filter actually cleans better than a new one. Changing the air filter too often can actually reduce filter efficiency and increase the opportunity for traces of dust to enter the engine. Wait until the element really needs servicing as indicated by the air flow restriction gauge.
- When the air filter element is removed or replaced, make sure all **dust is cleaned out** of the **air cleaner housing and hose**. Use a damp cloth and wipe the interior of the canister and hose clean (a little dirt left here will be sucked into the engine and reduce engine life). When the filter is reinstalled, make sure the **element is held tight and straight** in the canister for proper seating and sealing.
- Periodically check the air intake hose for cuts, nicks, etc., and the hose clamps for tightness.

## Oil

- Single viscosity or multi-viscosity oils may be used with the viscosity matching ambient temperatures for the engine operating conditions. This will **aid starting** in cold weather and assure proper lubrication in hot weather.
- Use only Briggs & Stratton oil filters. **Aftermarket filters may not seal properly** and/or have the incorrect pressure relief valve for proper lubrication.

#### IMPORTANT TIPS FOR CARE OF THE KOHLER **ENGINE - MODEL MBK**

### **Fuel System**

- Fuel must be clean free from water, dirt, and organic material.
- Change fuel filter on a regular basis and when contamination is suspected or found in the fuel.

#### Starting/Stopping

- Start engine with the throttle advanced off idle (1/4 to 1/2 throttle). This will aid starting, especially in cold weather.
- Keep the battery fully charged.
- Match crankcase oil viscosity to the ambient temperature, allowing the engine to crank faster and start easier.
- Allow engine to run at idle for a few seconds before stopping engine to avoid run-on or backfiring.

## **Cooling System**



## **A** CAUTION

DO NOT use a pressure washer to clean the cooling system on an air-cooled engine, mud may form under the cooling shroud on the cylinder head and cooling fan.

- Keep engine air intake screen and cylinder head fins free of grass clippings, chaff, and dirt. Inspect intake screen and cooling fins for cleanliness and no damage.
- Periodically remove two access panels in the engine shroud to inspect and clean cylinder head cooling fins.
- Check performance of the cooling system by starting the engine, holding a hand adjacent to the cylinder head, and feeling the cooling airflow.



## **A** DANGER

Make sure to keep hands clear of exhaust pipe, muffler, and moving parts when checking airflow.

 Operate the engine at full speed when moving. This allows the engine to produce full horsepower and move more cooling air through the engine cooling fins.

### **Air Cleaner System**

- Use **only** Cummins/Fleetquard air cleaner elements. Aftermarket elements may not seal in the air cleaner housing, allowing dirt to enter the engine. Also, aftermarket filters often skimp on the filtration media and require more frequent replacement (see following instructions).
- Use the air flow restriction gauge to indicate the need to service the air filter.
- **DO NOT overservice** or frequently "disturb" the air filter. A dirty air filter actually cleans better than a new one. Changing the air filter too often can actually reduce filter efficiency and increase the opportunity for traces of dust to enter the engine. Wait until the element really needs servicing as indicated by the air flow restriction gauge.
- When the air filter element is removed or replaced. make sure all dust is cleaned out of the air cleaner housing and hose. Use a damp cloth and wipe the interior of the canister and hose clean (a little dirt left here will be sucked into the engine and reduce engine life). When the filter is reinstalled, make sure the element is held tight and straight in the canister for proper seating and sealing.
- · Periodically check the air intake hose for cuts, nicks, etc., and the hose clamps for tightness.

#### Oil

- Use only multi-viscosity oils as specified with the viscosity matching ambient temperatures for the engine operating conditions. This will aid starting in cold weather and assure proper lubrication in hot weather.
- Use only Kohler oil filters. Aftermarket filters may not seal properly and/or have the incorrect pressure relief valve for proper lubrication.

#### **LUBRICATION**



## **WARNING**

DO NOT attempt to lubricate the machine with the engine running. Disengage the PTO clutch, shut off the machine, and remove the ignition key.

Proper lubrication is an important maintenance procedure. It reduces wear and makes the machine quieter and easier to operate.

#### **Engine Oil - Model MBV**

Engine Break-In Oil

No special break-in oil is required. The engine is serviced with 10W-30, Service Class SG oil from the factory. The oil should be changed after the initial engine break-in period of 5-8 hours. Thereafter, change oil after every 50 hours of operation.

Checking Engine Crankcase Oil Level

Check the engine crankcase oil level before use and after each 8 hours of continuous operation.

**IMPORTANT:** The importance of checking and maintaining the proper crankcase oil level cannot be overemphasized. Check the oil level BEFORE EACH USE.

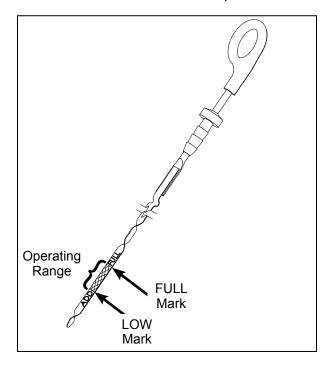
1. Park the mower on a level surface with the engine stopped. Also, make sure the engine is cool and oil has had time to drain into the sump [allow at least five (5) minutes after stopping the engine].

IMPORTANT: NEVER check or add oil with the engine running.

- 2. Before removing the dipstick, clean the area around the dipstick to keep any dirt or debris out of the engine.
- Remove the dipstick, wipe off with a clean rag, then reinsert the dipstick into the tube and press all the way down.

Remove the dipstick again and check the oil level on the dipstick. The oil level should be within the "Operating Range" on the dipstick (between the LOW mark and the FULL mark).

**IMPORTANT: DO NOT** operate engine without sufficient oil supply in the crankcase. DO NOT operate with oil level below the LOW mark or above the **FULL** mark on the dipstick.



**Dipstick Operating Range** 

If additional oil is needed, refer to Specifications for proper crankcase lubricant. Fill to the FULL mark.

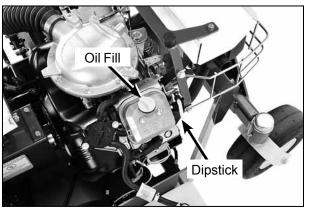
IMPORTANT: DO NOT overfill crankcase (oil above FULL level) as this CAN result in engine overheating, loss of power, and possible engine damage.

Changing Engine Crankcase Oil/Oil Filter

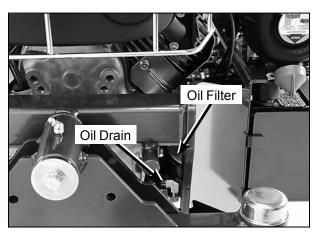
Change the engine crankcase oil after every 50 hours of operation and the oil filter after every 100 hours of operation as follows:

1. Park the mower on a level surface with the engine stopped. The engine oil should be warm before draining. If not warm from operation, start the engine and run a few minutes to warm the oil.

- Before removing the dipstick, clean the area around it to keep any dirt or debris out of the engine.
- 3. Remove the dipstick and oil drain plug, and drain oil into a suitable container. Be sure to allow ample time for complete drainage.
- Before removing the oil filter, clean the area around the filter to keep dirt and debris out of the engine.
- 5. Remove the old oil filter and wipe off the filter mounting surface on the engine.



Dipstick and Oil Fill - Model MBV (View from Above Left Side of Tractor)



Oil Drain and Oil Filter Locations - Model MBV (View from the Rear Right Side of Tractor)

6. Apply a thin coating of new oil to the rubber gasket on the replacement oil filter.

**IMPORTANT:** Use **ONLY** oil filters from the engine manufacturer. Aftermarket oil filters may not seal properly and/or may not have the correct pressure relief valve for proper lubrication.

- 7. Install the new oil filter on the engine. Turn the oil filter clockwise until the rubber gasket contacts the sealing surface, then tighten the filter an additional 1/2 to 3/4 turn.
- Reinstall the drain plug.
- 9. Fill the crankcase with new, clean oil. Use only crankcase lubricants recommended by the engine manufacturer. Refer to **Specifications** in this manual or the engine owner's manual. Use the recommended oil viscosity for the expected ambient temperature. Oil with the correct viscosity will aid starting in cold weather and assure proper lubrication in hot weather. **Fill to FULL mark** on the dipstick; crankcase capacity is 1.5 quarts (1.4 liters) when changing oil and filter.

**IMPORTANT:** Check the dipstick reading before pouring in the last 1/2 pint of oil and **fill only** to the **FULL** mark. The oil level should never be over the **FULL** mark on the dipstick; overfiling can result in engine overheating and loss of power.

10. Start the engine and check for oil leaks around the oil filter. Stop the engine, recheck the oil level, and add oil if necessary. (When the engine is first operated with a new oil filter, the oil level will drop slightly as the filter is filled with oil.)

#### **Engine Oil - Model MBK**

Engine Break-In Oil

No special break-in oil is required. The engine is serviced with 10W-30, Service Class SG oil from the factory. Change the oil after the initial engine **break-in period** of **5 hours**. Thereafter, change oil **after every 100 hours** of operation.

Checking Engine Crankcase Oil Level

Check the engine crankcase oil level before use and after each 8 hours of continuous operation.

**IMPORTANT:** The importance of checking and maintaining the proper crankcase oil level cannot be overemphasized. Check the oil level **BEFORE EACH USE**.

 Park the mower on a level surface with the engine stopped. Also, make sure the engine is cool and oil has had time to drain into the sump [allow at least five (5) minutes after stopping the engine].

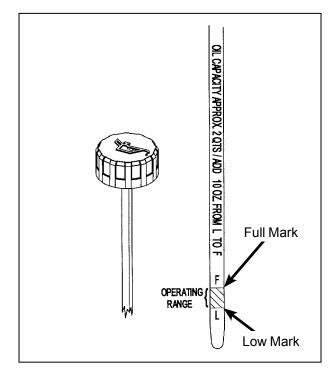
**IMPORTANT: NEVER** check or add oil with the engine running.

- 2. Before removing the dipstick, clean the area around the dipstick to keep any dirt or debris out of the engine.
- 3. Remove the dipstick, wipe off with a clean rag, then reinsert the dipstick into the tube and press all the way down.
- 4. Remove the dipstick again and check the oil level on the dipstick. The oil level should be within the "Operating Range" on the dipstick (between the "L" mark and the "F" mark).

**IMPORTANT: DO NOT** operate engine without a sufficient oil supply in the crankcase. **DO NOT** operate with the oil level below the "L" mark or above the "F" mark on the dipstick.

5. If additional oil is needed, refer to Specifications for proper crankcase lubricant. Fill up to, but not above, the "F" mark on the dipstick.

**IMPORTANT: DO NOT** overfill the crankcase (oil above "F" mark) as this **CAN** result in engine overheating, loss of power, and possible engine damage.

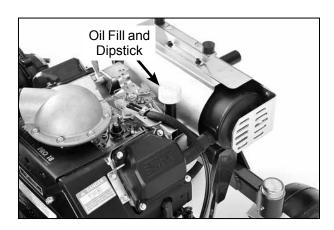


**Dipstick Operating Range** 

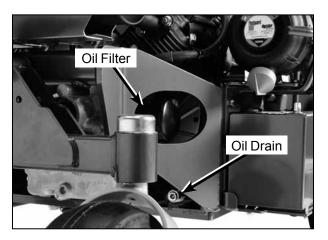
Changing Engine Crankcase Oil/Oil Filter

Change the engine crankcase oil **after every 100 hours** of operation and replace the oil filter every other oil change (**every 200 hours** of operation).

- Park the mower on a level surface with the engine stopped. The engine oil should be warm before draining. If not warm from operation, start the engine and run a few minutes to warm the oil.
- 2. Before removing the dipstick, clean the area around it to keep any dirt or debris out of the engine.
- 3. Remove the dipstick and oil drain plug and drain the oil into a suitable container. Be sure to allow ample time for complete drainage.



Dipstick and Oil Fill - Model MBK (View from Above Left Side of Tractor)



Oil Drain and Oil Filter Locations - Model MBK (View from the Rear Right Side of Tractor)

- 4. Before removing the oil filter, clean the area around the filter to keep dirt and debris out of the engine.
- 5. Remove the old oil filter and wipe off the filter mounting surface on the engine.
- 6. Apply a thin coating of clean oil to the rubber gasket on the replacement oil filter.

**IMPORTANT:** Use **ONLY** oil filters from the engine manufacturer (Kohler 12-050-01). Aftermarket oil filters may not seal properly and/or may not have the correct pressure relief valve for proper lubrication.

 Install the new oil filter on the engine. Turn the filter clockwise until the rubber gasket contacts the sealing surface, then tighten an additional 1/2 turn.

- 8. Reinstall the drain plug. Make sure it is tightened to 10 ft-lb (13.6 N·m).
- 9. Fill the crankcase with new, clean oil. Use only crankcase lubricants recommended by the engine manufacturer. Refer to Specifications in this manual or the engine owner's manual. Use the recommended oil viscosity for the expected ambient temperature. Oil with the correct viscosity will aid starting in cold weather and assure proper lubrication in hot weather. Fill up to, but not above, the "F" mark on the dipstick. Crankcase capacity is 1.85 quarts (1.75 liters) plus 1/2 pint (0.24 liters) for the new oil filter.

**IMPORTANT:** Check the dipstick reading before adding the last 1/2 pint of oil and **fill only to the "F" mark. DO NOT** overfill the crankcase (oil above "F" mark) as this **CAN** result in engine overheating, loss of power, and possible engine damage.

10. Start the engine and check for oil leaks around the oil filter. Stop the engine, recheck the oil level, and add oil if necessary. (When the engine is first operated with a new oil filter, the oil level drops slightly as the filter is filled with oil.)

## **Grease Fitting and Oil Point Lubrication**

Lubricate the grease fittings and oil points after every 25 hours of operation. Lubricate more often when operating in dusty or dirty conditions. Use SAE general purpose lithium or molybdenum base grease for grease fittings and light machine oil (SAE 10) to lubricate oil points. Lubricate the locations shown in the Chassis and Deck Lubrication Points illustration.

**NOTE:** PTO universal joints (on the deck and tractor) require routine lubrication **after every 8 hours** of running time.

**NOTE:** The best way to lubricate the PTO tube half of the universal joint assembly is to remove it from the tractor. See instructions for removing and installing PTO quick coupler, refer to *Deck Installation* in **Mower Deck Installation on Tractor** in the **Assembly Instructions.** 

Ident No.	Location	Lubrication Type	No. Places
NO.	Location	туре	riaces
1	Deck Caster Wheel Fork Pivot	Grease	2
2	Deck Caster Wheel Bearing	Grease	2
3	Tee Gearbox, Deck	Oil*	1
4	Blade Drive Gearbox	Oil*	2
5	Universal Joint Shaft Assembly	Grease**	1
6	Deck Support Arm Socket	Grease	2
7	Pivot Assembly, Tilt-Up Deck	Grease	4
8	Steering Lever Pivot	Grease	2
9	Deck-to-PTO Coupling	Grease	1
	(Grease Slide Area)		
10	Universal Joint Tube Assembly	Grease**	1
11	Deck Support Arm Pivot	Grease	2
12	FSC Lever Pivot	Grease	1
13	Body Latch	Oil	1
14	Clutch Actuator Rod	Grease	1
15	PTO Clutch Lever Pivot	Grease	1
16	Transaxle Oil Reservoir	Oil/20W-50	1

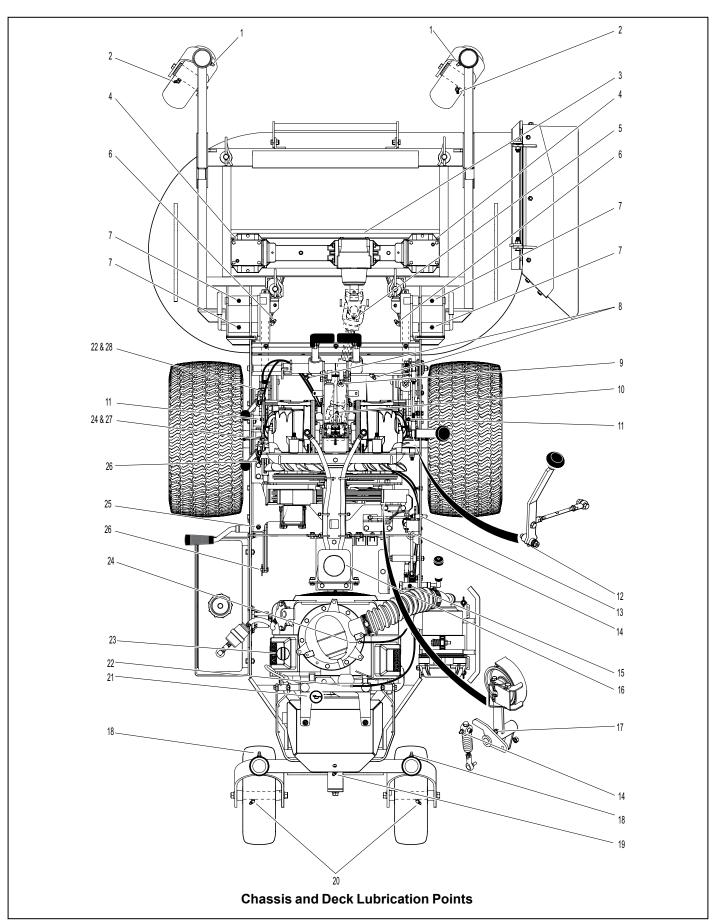
ldent No.	Location	Lubrication Type	No. Places
17	Clutch Engagement Pivot	Grease	1
18	Rear Wheel Pivot	Grease	2
19	Tail Wheel Caster Pivot	Grease	1
20	Rear Wheel Bearing	Grease	2
21	Engine Oil (MBK)	Oil***	1
22	Throttle Control Cable Ends (MB\	/) Oil	2
23	Engine / Oil Filler	Oil***	1
24	Choke Control Cable Ends (MBV)	) Oil	2
25	Parking Brake Lever	Grease	1
26	Parking Brake Clevis	Oil	2
27	Choke Control Pivot	Oil	1
28	Throttle Control Pivot	Oil	1

<sup>\*</sup> Gearboxes are permanently lubricated and sealed requiring no scheduled lubrication. Oil level should be checked only when an oil leak is noted.

NOTE: DSD42 Tilt-Up Deck is shown for reference. For other Deck Lubrication Points, refer to Deck and Carrier Frame Illustrated Parts Manual.

<sup>\*\*</sup> Grease every eight (8) hours.

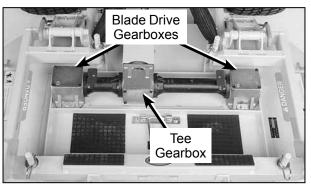
<sup>\*\*\*</sup> Refer to **Engine Oil** located on page 40.



#### **Mower Deck Gearbox Lubrication**

The mower deck gearboxes (tee gearbox and blade drive gearboxes) are connected as a unitized assembly, and oil flows freely between them. The gearboxes are permanently lubricated (oil filled) and sealed requiring no scheduled lubrication. However, the gearbox oil seals should be checked every 25 hours for indication of an oil leak; particularly the lower seals on the blade drive gearboxes should be inspected, since they operate in a dirty environment. If an oil leak is noted, replace the oil seal and relubricate the gearbox assembly as follows:

1. Remove gearbox cover (footrest). Deck orientation should be the normal operating position.



## Mower Deck Gearboxes (Shown with Gearbox Cover Removed for Clarity)

- 2. Clean the area around the individual gearbox cover plates to prevent contaminants from entering the gearcase.
- 3. Remove the screws securing the cover plates on the blade drive gearboxes.
- Check the level of lubricant in the gearboxes. If the lubricant is low, add SAE E.P. (Extreme Pressure) 80W-90 (API GL-5) gear lube until the oil level is up to (submerges) the horizontal shaft in the gearbox (shaft parallel to cover plate).

**NOTE:** In case the gearboxes are completely drained of oil, approximately 5 fl. oz. (15 cl) of oil per gearbox is required to refill the gear drive assembly.

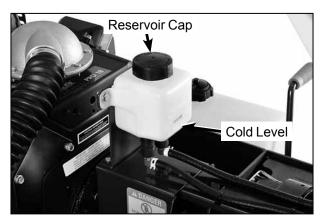
**NOTE:** Since the gearboxes are connected as a unit by connector tubes, it is necessary to add oil slowly. Allow a few minutes after adding oil for the oil to flow throughout the assembly and the oil level to stabilize before reassembly.

**IMPORTANT: DO NOT** overfill the deck gearboxes. The gearbox assembly is not vented, and overfilling with oil will cause excessive pressure and result in oil leaks.

5. Check condition of the cover gasket and replace if worn or damaged. Reinstall gearbox cover plates; torque screws to 24 in-lb (2.7 N·m).

#### **Transaxle Lubrication**

- The transaxle oil lubrication is SAE 20W-50 (API Service Class SL or higher) engine oil.
- Inspect both transaxle cases and hoses after every 100 hours of operation for visible leaks.
- The fluid level of each transaxle can be checked visually by looking at the fluid level in the expansion reservoir. When the transaxles are cold, the fluid level in the expansion reservoir should be between 1/4 in. and 1/2 in. (0.64 cm and 1.27 cm).

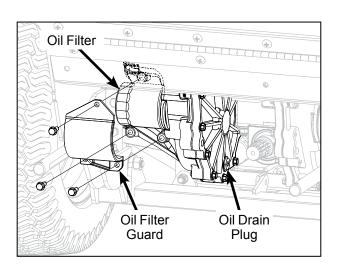


**Expansion Reservoir Location** 

#### Transaxle Oil and Filter Change

Change the transaxle oil after the initial **break-in period** of **75-100 hours**. Thereafter, change oil **every 400 hours** of operation as follows:

- Thoroughly clean the exterior of the transmission housing before servicing. Using a 1/4 in. hex wrench, remove the plug on the lower inside of each transaxle allowing the oil to drain.
- 2. Remove and replace the oil filters using a 3/8 in. hex wrench. (Refer to **Transaxle Oil Drain Plug, Filter, and Guard Location** illustration.)



## Transaxle Oil Drain Plug, Filter, and **Guard Location** (Shown with Deck Support Arms Removed for Clarity)

- Reinstall drain plugs.
- Remove the oil reservoir hose attached to the elbow on top of the transaxles and remove the elbows to access the oil fill openings.
- Fill the transaxles with 20W-50 (API Service Class SL or higher) oil through the opening where the elbows were. Fill up to the opening.
- Before reinstalling the elbows, screw the locking nut on the elbows down until they are snug (the o-ring on the elbow will be to the bottom of the o-ring groove).
- 7. Reinstall the elbows. When the elbow begins to be snug, position the elbow as it was when removed and tighten the locknut.
- Fill reservoir to 1/4-1/2 in. (6-13 mm) with 20W-50 (API Service Class SL or higher) oil.
- Start and drive the unit for 1 2 minutes.
- 10. If the transaxles sound noisy or have poor steering response, recheck oil level in both transaxles by removing the elbows (check oil level at fill opening).
- 11. If oil needs to be added refer back to steps 4-10.

#### **CLEANING**



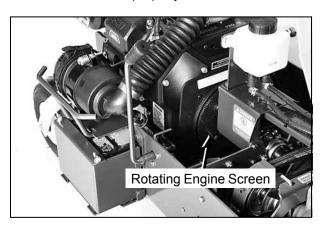
## **A** CAUTION

If a pressure washer is used on the exposed working parts, avoid water on the electrical parts and the engine cooling sys-

## **Engine Air Cooling System**

To prevent engine overheating and possible engine damage, clean grass clippings, chaff and dirt from the rotating engine air intake screen every 8 hours of operation. In certain mowing conditions (dry grass, leaves, tree "cotton", etc.) it may be necessary to check and clean this area several times each day to prevent engine overheating. Also, visually check inside cylinder head shroud and between cylinder head fins for material packed in this area which would prevent cooling airflow; remove shroud and clean as required.

**IMPORTANT:** Yearly or every 100 hours, remove engine cooling shroud and clean cylinder head cooling fins to prevent overheating. Make sure cooling shroud is reinstalled properly.

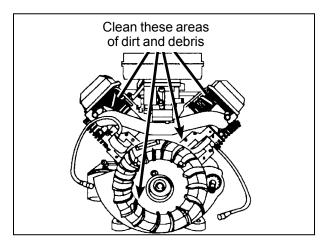


**Keep Engine Screen Clean** 

## $\Lambda$

## CAUTION

Operating the engine with a blocked air intake screen, dirty or plugged cooling fins, and/orcoolingshrouds removed will cause engine damage from overheating.



Clean Cooling Fins and Fan - Model MBV

#### Cylinder Head Cooling Fins

It is essential for performance and longevity of the air-cooled engine to keep the cylinder head cooling fins clean and free of obstruction. After **every 8 hours** of operation, check the performance of the cooling system by starting the engine, holding a hand adjacent to the cylinder head, and feeling the cooling airflow. If there is little or no airflow, clean the cooling fins as follows:



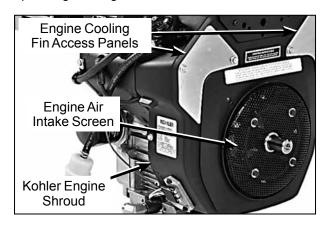
## **DANGER**

Make sure to keep hands clear of exhaust pipe, muffler, and moving parts when checking airflow.



## **Cooling System Airflow**

**Every 100 hours,** inspect and clean the cooling fins (more often when operating in extremely dusty, dirty conditions). Remove the two (2) cooling fin access panels in the engine shroud and clean the cooling fins and external surfaces using compressed air. Make sure to reinstall the access panels before operating the engine.



**Engine Air Intake Screen** and Cooling Fin Access Panels

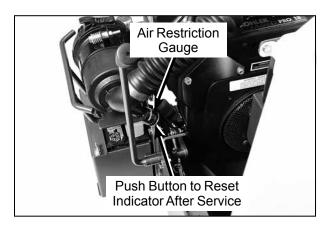
#### **Engine Air Cleaner System**

Cummins/Fleetguard OptiAir™ Air Cleaner

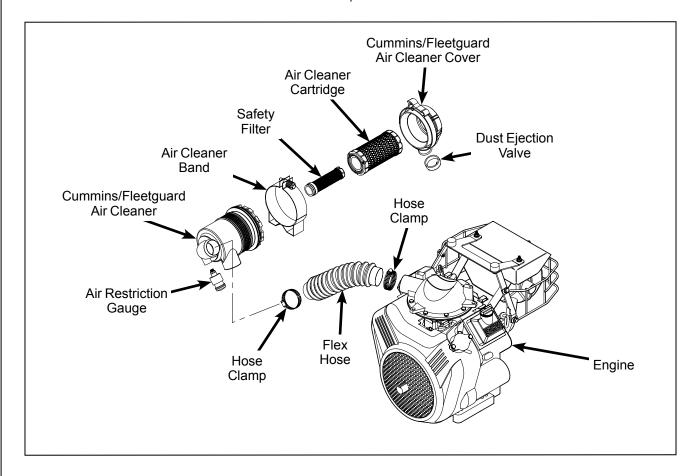
A remote mounted Cummins/Fleetguard OptiAir™ air cleaner provides the air filtering function. The paper filter element slides over an outlet tube inside the air cleaner canister with **radial** sealing action, eliminating the possibility of dust leaks due to improper filter installation. Intake design, internal baffling, and a dust ejection valve provide dust separation and automatic precleaning action. Daily or frequent servicing of the air cleaner **is not required.** Use the air restriction gauge on the air cleaner outlet to indicate when the air filter needs servicing — a red flag will appear when the filter is overly restricting airflow into the engine.

**IMPORTANT:** Use **only** Cummins/Fleetguard air filter elements for replacement (Walker 2090-1 or 2090-3). Aftermarket filters may not seal properly or filter efficiently.

**IMPORTANT:** The Cummins/Fleetguard air cleaner uses a dry paper-type air filter element. **NEVER** apply oil to the paper element.



**Air Restriction Gauge Location** 



**Engine Air Cleaner System Components** 

Inspect the paper element after every 100 hours of service and replace the element and safety filter yearly (or when dirty or damaged). More frequent replacement may be required when operating in extremely dusty conditions as indicated by the air restriction gauge. Service the air cleaner as follows:

- 1. Lift Mono Latch Twist Lock™ and twist the OptiAir™ cover to the left into the "open" position to remove the air cleaner cover. Wash the cover and dust ejection valve. Check that these components are in good condition. The dust ejection valve is subject to wear and deterioration and should be replaced yearly or when damaged. The lips of the valve should close and fit together; any cracks, deformation, or wear in the valve is cause for replacement.
- Remove the filter element by pulling it out of the canister. There will be some initial resistance as the filter seal breaks loose and slides off of the outlet tube. Gently move the end of the filter up and down and side to side or twist to loosen the seal. Use gentle action to minimize the amount of dust dislodged as the filter is removed.
- 3. Replace the filter element.

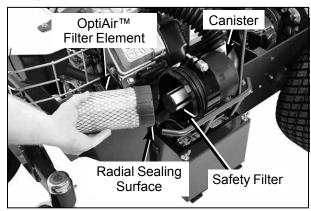
**NOTE:** Washing the element in water or cleaning solution is **not recommended.** Do not try to clean the element with compressed air.

- Use a bright light inside the element to inspect for damage. Check the element very carefully for pin holes or other damage that will allow dirt to leak through the paper media. Replace element if necessary.
- Without removing, visually inspect the condition of the safety filter for damage or holes. The safety filter should only be removed for yearly replacement (or when dirty or damaged).
- Check the condition and resilience of the radial sealing surface (inside of the open end) of the filter. Replace the filter if any cracks, tears, or other damage to the sealing surface are noted.
- Use a clean, damp cloth and wipe the interior of the air cleaner canister clean. Use special care to clean both the inside and outside surfaces of the outlet tube.

**IMPORTANT:** Any dust left on the inside of the outlet tube will go into the engine and cause wear.

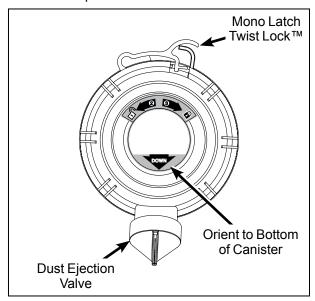
- 8. Check the outside surface of the outlet tube for smoothness and cleanness (this is the sealing surface).
- 9. Insert and seat the safety filter and OptiAir™ element carefully into the canister, applying pressure at the outer rim of the filter; not at the flexible center. Make sure the filter element is completely in place before installing the cover.

**NOTE: DO NOT** use petroleum based lubricants on the sealing surfaces of the filter; use talcum powder or dry silicone lubricants if required for filter installation.



**Air Filter Element Replacement** 

10. Install the cover with the word "DOWN" properly oriented to the bottom of the canister. Twist the OptiAir™ cover to the right and put into the "closed" position.



## **Proper Orientation of Air Cleaner Cover**

- 11. Check the air intake hose for cuts, nicks, cracks, etc., and the hose clamps for tightness.
- 12. Reset the air restriction indicator (press button on the end of indicator).

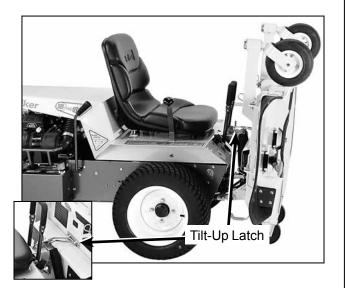
#### **Grass Buildup in Mower Housing**



## **DANGER**

Before raising or removing the mower deck for cleaning, stop the engine, remove the ignition key, and disconnect the spark plug wires.

- Raise the deck lock lever handle on each side of the carrier frame and pull out to release carrier frame for tilting action.
- Using the carrier frame lift handle, raise deck to the TILT-UP position and insert the deck hook into the tilt-up latch on the tractor body.



Deck Secured in TILT-UP Position



## DANGER

Do not operate the mower with deck in tiltup position. Do not move the tractor with the deck in the tilt-up position.

Clean grass buildup underneath the deck using a pressure washer (and scraper if required).

NOTE: If the buildup is severe, it may be easier to clean the deck by removing the deck assembly from the tractor and standing the desk assembly on its "nose".

**NOTE:** While some degree of material buildup in the mower deck housing can be tolerated, a point is finally reached where cutting quality deteriorates and clogging begins to occur because of too much buildup on the baffling and housing.

4. Lower the deck to the normal operating position and re-engage the deck lock levers.



## CAUTION

Do not operate machine with deck tilt-up pivot joint unlocked.

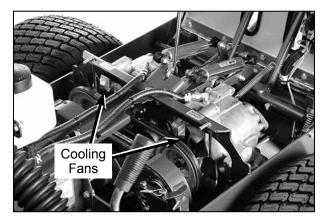
#### **Transaxle Cooling Fins**

Keeping the cooling fins on the transaxles clean and free of obstruction is **essential to avoid overheating** the transmission fluid and shortening transmission life. The cooling fins should be checked **every 100 hours**; and cleaned if necessary.

To clean the fins, use compressed air and/or a pressure washer. The cooling fins extend all the way around the housing -- the fins underneath need to be clean as well as the more visible fins above. Also, pay close attention to the area under the drive pulley.

**IMPORTANT:** In case an oil leak develops on the input shaft, the cooling fan blowing dusty air and oil on the transmission will **quickly** pack the cooling fins with **oily dirt.** If this condition occurs, contact your dealer immediately to avoid overheating and damaging the transaxles.

An additional procedure in maintaining transaxle cooling is to inspect the cooling fans. Replace the fan(s) if blades are missing or damaged.



**Transaxle Cooling Fans** 

#### CHECKING/SERVICING



## DANGER

To prevent accidental starting of the engine when servicing or adjusting the machine, remove the key from the ignition switch and disconnect the spark plug wires.

#### **Security of Air Cleaner System**

**NOTE:** The following inspection is **only an external inspection** and should be done without "**disturbing**" the filtration components.

On a daily basis, visually inspect the external condition of the complete air cleaner system. The following items should be inspected:

- Check the Cummins/Fleetguard OptiAir™ air cleaner canister for damage. Make sure the cover is in place and the cover latch is secure do not run the engine without the air cleaner cover in place and secure.
- Inspect the air intake hose for cracks, nicks, cuts, etc., and check the hose clamps for tightness.
- 3. Check to make sure the air flow indicator is in place and tight.

#### **Battery**

**NOTE:** For initial battery service during setup, refer to **Battery Service** in **Assembly Instructions**.

**IMPORTANT:** Make sure battery is securely mounted in the frame. A loose battery may cause damage to the case resulting in acid leakage and severe damage to the machine. A hazard may be created by damage to critical working parts and safety systems.

## Cleaning the Terminals

If battery terminals are corroded, **remove battery** from the mower. Using a wire brush, remove corrosion with a solution of **one part baking soda and four parts water**. Rinse with clean water. Coat the terminals with petroleum jelly or terminal protector spray to retard further corrosion.

Charging the Battery



### **DANGER**

# BATTERIES PRODUCE EXPLOSIVE GASES

- Charge the battery in a well-ventilated area, so that gases produced while charging can dissipate.
- Keep sparks, flames, and smoking materials away from the battery at all times.
- Make sure the battery cap vents are open (check manifold vent on each cap).
- Make sure the battery charger is unplugged before connecting or disconnecting cables to the battery.

Check the battery charge by measuring the specific gravity of electrolyte; if specific gravity is less than 1.225, the battery will need to be charged as follows:

• Charge the battery at 15 amps for 10 minutes. **DO NOT** exceed 20 amps maximum recommended charging rate. Charge until specific gravity is at least 1.250. Total charging time should not exceed one (1) hour.

### **Tire Pressure**

Inflate tires to pressures shown below:

Deck Caster Wheel = 20 PSI (137 kPa)

Drive = 15 PSI (103 kPa) Rear = 20 PSI (137 kPa)

## Wheel Nut Torque

Check **every 100 hours** the eight (8) Drive Tire mounting nuts. They should each be torqued to 75 to 85 ft-lbs. (101.7 to 115.2 N·m).

### **Sharpen Mower Blades**

Check mower blade(s) for straightness, sharpness, condition of the cutting edge, and balance every 10 hours of operation (or more often when mowing abrasive type grass or operating on sandy soils). Replace blades if worn, bent, cracked, or otherwise damaged (refer to REPLACING/REPAIRING the Mower Blades in this section). Use the following procedure to check and sharpen blades:

Keep blades sharp - cutting with dull NOTE: blades not only yields a poor mowing job but slows the cutting speed of the mower and causes extra wear on the engine and blade drive by pulling hard.

- Stop the engine, remove ignition key, and disconnect the spark plug wires before raising the mower deck to service blades.
- 2. Raise the deck and secure it in the TILT-UP position (refer to Deck Secured in TILT-UP Position photo in CLEANING of Grass Buildup in Mower Housing in this section).



### **DANGER**

NEVER operate cutter blades with the deck in the raised position.

NOTE: PTO shaft must be disconnected before checking blades for straightness.

3. Check the blades for **straightness** by marking the blade tip position inside the deck housing, and then rotating the opposite end of the blade to the same position and comparing. If the difference in blade tip track is more than 1/8 in. (3 mm), the blade is bent and should be replaced.



## **⚠** WARNING

DO NOT try to straighten a blade that is bent. NEVER weld a broken or cracked blade. ALWAYS replace with a new blade to assure safety.

- 4. If the blade cutting edge is dull or nicked, it should be sharpened. Remove blades for sharpening by grasping the end of the blade using a rag or a thick, padded glove, while loosening and removing the nut, lock washer, and flat washer that mounts the blade.
- 5. Grind cutting edge at the same bevel as the original. Sharpen only the top of the cutting edge to maintain sharpness.

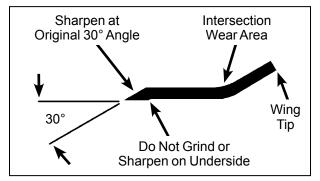
NOTE: Blades can be sharpened with an electric blade sharpener, conventional electric grinder, or a hand file.



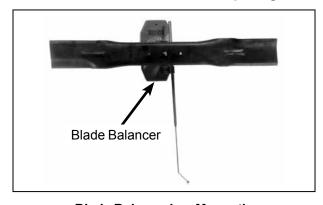
## **⚠** CAUTION

**ALWAYS** wear eye protection and gloves when sharpening a blade.

6. Check blade balance by positioning the blade horizontally on a blade balancer or use a nail or shaft through the center hole. If either end of the blade rotates downward, grind (remove) metal on that end until the blade will balance. The blade is properly balanced when neither end drops. Balance of a blade is generally maintained by removing an equal amount of material from each end of the blade when sharpening.



**Mower Blade Profile For Sharpening** 



**Blade Balanced on Magnetic Wall-Mounted Balancer** 

Mount the blade with wing tips pointing up into the housing. Reinstall the blade, washer, lock washer, and nut. Tighten the nut to 60 ft-lb (81.3 N·m).

#### **Drive Belts**

Raise the body and inspect the condition of the three (3) drive belts after every 25 hours of operation -- engine/PTO drive and ground drive. If the belts show signs of cracking or deteriorating, the belts should be replaced. Refer to REPLACING/REPAIRING the Drive Belts in this section.

#### Mower Deck Gearbox Oil Seals

The mower deck gearbox seals should be inspected every 25 hours for evidence of oil leaking; particularly the lower oil seal on the blade drive gearbox. This seal is protected by the trash guard on the blade hub and seal protector plate on the housing, but is still vulnerable to seal damage due to operating in an adverse environment. The mower blade must be removed for inspection of the seal, so it is recommended to inspect the gearbox seals when blades are removed for sharpening. If an oil leak is noted, the seal should be replaced and the gearbox assembly relubricated. Refer to LUBRICATION for Mower Deck Gearbox Lubrication in this section.

### **Spark Plugs**

**Every 100 hours,** remove the spark plugs, inspect, clean, and reset the gap (or replace with a **new plug).** Clean spark plug with a wire brush. If the electrodes are burned short or pitted, replace the plug (refer to **Specifications** for the proper type of replacement plug). Check the spark plug gap with a wire-type feeler gauge and set the gap between 0.028 and 0.032 in. (0.7 and 0.8 mm). Reinstall and tighten to 17 ft-lb (23.0 N·m). Both spark plugs should be replaced yearly.

#### **Breaker Points - Model MBV**

The Briggs & Stratton engine is equipped with electronic ignition. No breaker points, maintenance, or adjustments are necessary with this system. Contact an authorized Briggs & Stratton engine dealer in case of ignition failure.

#### **Fuel Lines and Clamps**

**Every year,** inspect the fuel line from the tank to engine for deterioration or damage. Also, inspect the fuel line clamps for tightness. Good preventive maintenance calls for complete replacement of fuel lines and clamps every two (2) years.

#### **Blade Brake Action**



#### WARNING

It is important to check and maintain blade brake action for safe operation of the machine.

Check the function of the cutter blade brake by engaging the blade clutch (PTO), operating the engine at full throttle, then disengaging the clutch and measuring how quickly the blades stop. Watch the rotation of the blade drive shaft as a visual indication that movement has stopped. If the brake is working properly, all rotation will stop five (5) seconds after disengagement of the clutch. If the brake system malfunctions - blades do not stop in five (5) seconds - adjust or repair the brake before operating the mower. Contact your Walker dealer for this service or refer to the Walker Service Manual.

#### **PTO U-Joints**

The PTO U-joints should be inspected **yearly** for looseness and wear. If either is noticed, the respective shaft or tube should be replaced. A worn U-joint can cause vibration and extensive damage to the PTO and deck gearboxes.

#### **Engine Starter - Model MBK**

**Yearly or every 500 hours** disassemble and clean the solenoid shift starter. Refer to the Kohler Service Manual for this procedure or contact an authorized Kohler engine dealer to perform this service.

#### Safety Switch System



## **WARNING**

It is important to check and maintain the safety switch system for safe operation of the machine.

There are three (3) safety interlock switches on the tractor; Seat Switch, FSC Neutral - Park Switch, and PTO Switch.

If any of the following conditions occur during starting or operating, a safety interlock switch may be malfunctioning. Contact your Walker dealer for troubleshooting and/or replacement.

- With an operator in the seat, the engine starts with the Forward Speed Control (FSC) and/or the PTO engaged.
- With an operator in the seat, the engine starts but dies soon after the Forward Speed Control (FSC) or PTO is engaged.
- Without an operator on the seat, the engine starts and continues to run with the Forward Speed Control (FSC) and/or PTO engaged.
- With an operator in the seat, the Forward Speed Control (FSC) and PTO disengaged and panel horn works, but the starter is not engaging.

#### Forward Speed Control Friction Lock

The FSC friction lock is designed to hold the selected forward travel speed when the steering levers are moved and yet the friction is not too heavy to make moving the FSC control difficult (too much friction). The procedure for checking the FSC friction lock is as follows:

- 1. Place the FSC in the full **FORWARD** position and pull both steering levers back; the FSC lever should not move. If the FSC lever moves back when the steering levers are pulled back, the friction needs to be increased.
- 2. With the steering levers held back, move the FSC lever back from the **FORWARD** position. With a proper amount of friction adjusted, the FSC lever should move back with a slight amount of resistance (friction). If the FSC lever movement is "stiff", the friction needs to be decreased.

If the FSC friction lock needs to be adjusted, refer to Forward Speed Control Friction Adjustment in AD-**JUSTMENTS** in this section or contact your Walker dealer.

#### REPLACING/REPAIRING



## **A** DANGER

To prevent accidental starting of the engine when replacing parts or repairing the machine, remove the key from the ignition switch and disconnect the spark plug wires.

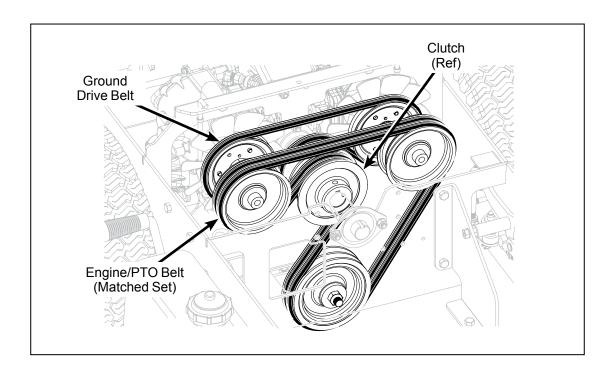
IMPORTANT: ALWAYS use genuine factory replacement parts. Substitute parts CAN result in product malfunction and possible injury to the operator and/or others.

#### **Drive Belts**

There are three (3) individual belts on the ma-

- Engine/PTO Belt (Matched Set)
- Ground Drive Belt

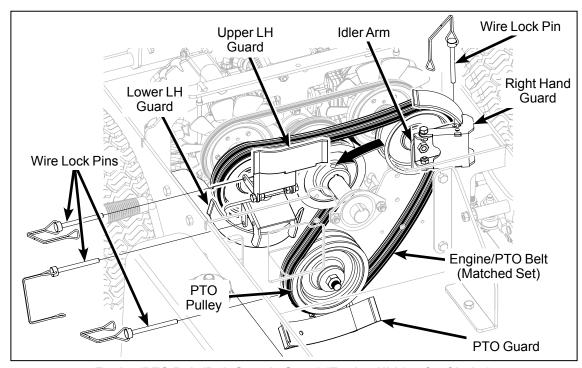
The belts may be removed and replaced using the procedures described on the following pages.



**Belt Locations** 

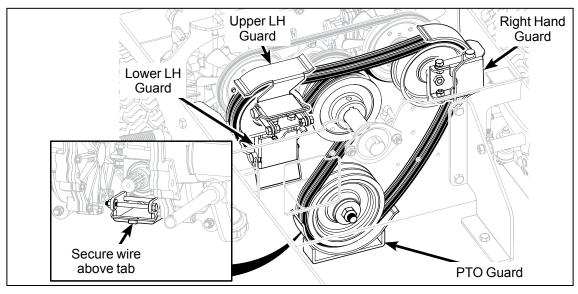
#### Engine/PTO Belt

- 1. To remove the engine/PTO belt:
  - a. Remove wire lock pins (4), open belt guards.
- b. Relax belt by depressing idler arm.
- Roll the belt off the pulley and remove the belt.



**Engine/PTO Belt (Belt Guards Open) (Engine Hidden for Clarity)** 

- 2. To replace the engine/PTO belt:
  - a. Reverse the removal procedure to replace the engine belt.
- b. Secure wire on lock pin above tab on lower PTO guard.

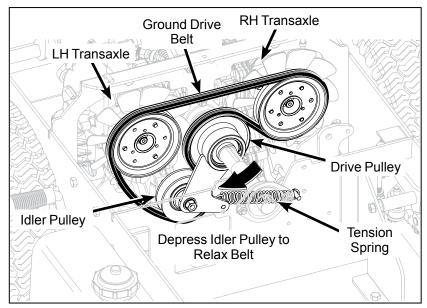


Engine/PTO Belt (Belt Guards Closed) (Engine Hidden for Clarity)

## REPLACING/REPAIRING

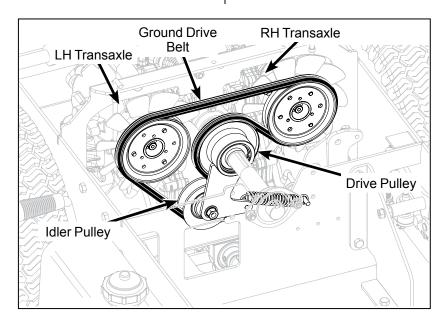
#### **Ground Drive Belt**

- 1. To remove the ground drive belt:
  - a. Depress the spring-loaded idler to relax belt.
- b. Slide belt off pulleys, then release the idler.



## **Ground Drive Belt Assembly (Disengaged)**

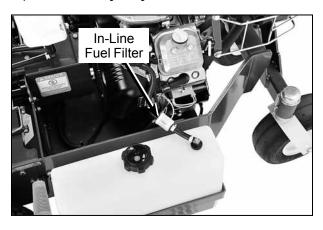
2. Reverse the procedure to install the ground drive belt.



**Ground Drive Belt Assembly (Engaged)** 

#### **Fuel Filter**

Models MBV and MBK are equipped with an in-line fuel filter. Visually inspect the filter periodically, and replace the filter yearly.



**Fuel Filter Location - Model MBV** 



**Fuel Filter Location - Model MBK** 

**IMPORTANT:** Replace the fuel filter only in a clean area where the fuel line and connections will not be contaminated by any dust and dirt.



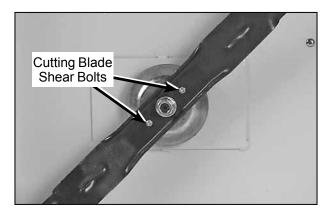
## **⚠** DANGER

Gasoline is extremely flammable and can be highly explosive. To minimize danger:

- Use only an approved fuel container for gasoline.
- DO NOT allow open flames or sparks near the machine while performing maintenance or refueling; DO NOT smoke while working with fuel.
- Wipe up spilled gasoline immediately and completely.
- 1. Expand and slide clamps on either side of the filter away from filter and pull fuel lines off filter.
- 2. Replace filter.

#### **Blade Overload Shear Bolts**

The cutting blade is keyed to the blade hub by **two (2) shear bolts** (10-24 x 5/8 in. stainless steel machine screws). These bolts are designed to shear and protect the blade drive gearbox from damage if the blade encounters a shock load.



**Cutting Blade Shear Bolts** 

NOTE: Tightening the 5/8-18 blade mounting nut to 60 ft-lb (81.3 N·m) is also important for proper shock load protection. It is important to not overtighten the mounting nut since this defeats (overrides) the function of the shear bolts.

If these bolts shear, remove the blade and install new bolts. Refer to **CHECKING/SERVICING** in this section for **Sharpen Mower Blades** which describes the blade removal and installation procedure.

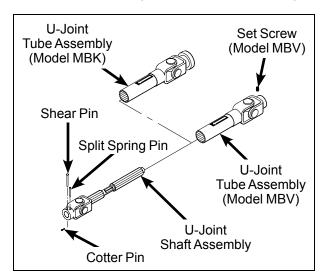
After reinstalling the blade, check blade timing (on gear driven decks) by moving blades through **one** (1) complete revolution. Make sure blade tips pass clear of each other. If timing is incorrect, contact your Walker dealer.

#### **PTO Shear Pin**

The PTO drive shaft connection to the deck gearbox has a shear pin to provide shock load protection to the mower deck drive. This system provides **primary shock protection** in case of blade impact and will normally shear before the individual shear bolts on the blade hub.

When the PTO pin has sheared, use the following procedure to replace it:

- Loosen the two bolts securing the PTO shaft guard on the deck; lift the guard off. (Holes in guard are slotted for easy removal.)
- Rotate U-joint on shaft to align the shear pin hole with the hole (and shear pin fragment) in the shaft. Use a punch to drive the remaining portion of the old shear pin out.
- 3. Install new shear pin and secure with cotter pin.



#### PTO Shear Pin

**IMPORTANT:** Use only Walker P/N 8067-13 shear pins for replacement to provide proper shock protection -- these pins are hardened to shear under a specific amount of load.

4. Reinstall the PTO shaft guard.

Before operating the deck, inspect the blade overload shear bolts and also check blade timing (on gear driven decks) by moving blades through **one** (1) complete revolution. Make sure blade tips pass clear of each other. If timing is incorrect, contact your Walker dealer.

#### Mower Blades

Mower blades are removed and remounted as described in Sharpen Mower Blades instructions. During the course of sharpening and inspecting mower blades, if there are any of the following conditions of wear or damage, blades should be replaced for reasons of safety and performance of the machine:

- An excessive amount of the flat section of the blade has been ground away (removed) when the blade is sharpened. Replace the blade when less than a 3/4 in. (19 mm) flat section remains at the blade tip.
- Examine ends of the blade carefully, especially the intersection where the flat section of the blade turns up to form the "wing tip" (refer to Mower Blade Profile for Sharpening illustration in Sharpen Mower Blades instructions). Since sand and abrasive material can wear metal away in this area, the blade should be replaced when metal thickness has worn to 1/16 in. (1.6 mm) or less.



## **⚠** DANGER

When blades are operated over sandy soil, and if blades are allowed to wear, a "slot" may be worn into the wing tip of blade. Eventually a piece of the blade may break off creating a serious potential for injury or damage.

- Check the blades for straightness by marking blade tip position inside the deck housing and then rotating the opposite end of the blade to the same position and comparing. If the difference in blade tip track is more than 1/8 in. (3 mm), the blade is bent and should be replaced.
- Inspect the blade surface, especially in formed areas, for cracks. Replace the blade if any cracks are found.



### **WARNING**

DO NOT try to straighten a blade that is bent. NEVER weld a broken or cracked blade. ALWAYS replace with a new blade to assure safety.

Reinstall the blades following procedure from Sharpen Mower Blades instructions. If blades are replaced, always use Walker original equipment blades to ensure safety and optimum performance. The quality and performance of replacement blades offered by other manufacturers cannot be guaranteed, they could be dangerous.



## CAUTION

ALWAYS use genuine factory replacement parts. Substitute parts CAN result in product malfunction and possible injury to the operator.

#### **ADJUSTMENTS**

#### **Transmission Control**

**IMPORTANT:** The proper adjustment of the transaxle control stops is **essential** for efficient operation and life of the transaxle. These stops are properly adjusted at the factory and should only require readjustment if the transaxle or related control linkage is removed or changed.

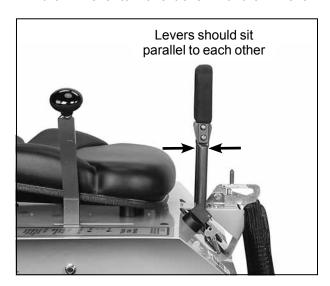
**NOTE:** It would not be unusual for a new machine, after initial 5 or 10 hours of operation, to begin to not travel straight (this is due to the break-in of the transaxles).

Steering Lever Position Adjustment - Step 1

**NOTE:** For proper operation, the steering levers should be adjusted to sit evenly using the following procedure.

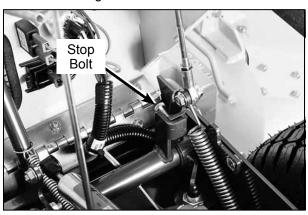
 Examine the steering levers to make sure they are parallel front to back in relation to one another. If they are not equal, adjust accordingly. (The handles may or may not be even at this point.)

**NOTE:** The **LH** steering lever is non-adjustable. This procedure will require adjustment of the RH lever to make it even with the LH lever.



**Lever Alignment** 

 Adjust the position of the RH lever by turning the stop bolt in the Speed Control Actuator in or out. Turning the stop bolt in will make the RH lever move back, and turning it out will make it move forward. Tighten the locknut.

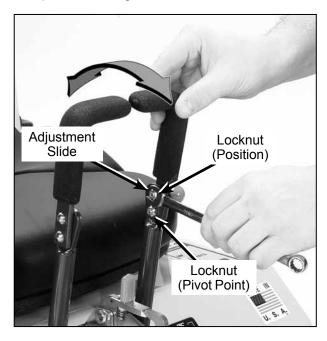


**Stop Bolt Location** 

#### Steering Handles Adjustment - Step 2

 An adjustment range of approximately 3 in. (76.2 mm) is available on the steering handles

 the handles can be adjusted forward or aft depending on the arm length of the operator.
 The handles can be adjusted by loosening the locknut at the pivot point and the locknut holding the handle in position in the adjustment slide.
 Adjust the handles into the most comfortable position and tighten both locknuts.



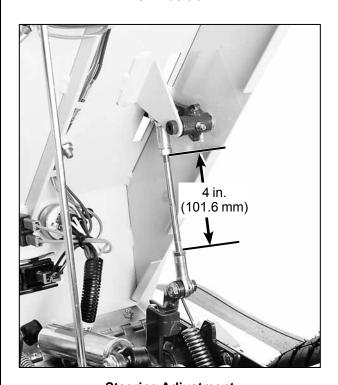
**Steering Lever Adjustment** 

#### Neutral Position Adjustment - Step 3

 With the Forward Speed Control (FSC) in NEU-TRAL, the lever should be straight up. Adjust by loosening the jam nuts on the FSC Rod and turn the rod to attain the straight up position. Tighten the jam nuts.

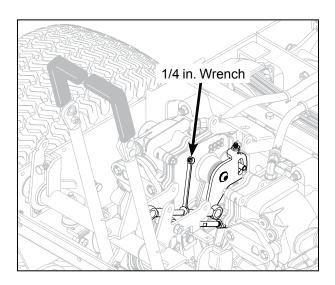


**FSC Position** 



**Steering Adjustment** 

 The initial adjustment for neutral is to loosen the jam nuts on each end of the Hydro-Gear Control Rods and turn the rods to achieve a measurement of 4 in. (101.6 mm) between the jam nuts. Be sure to tighten jam nuts before making the measurement.

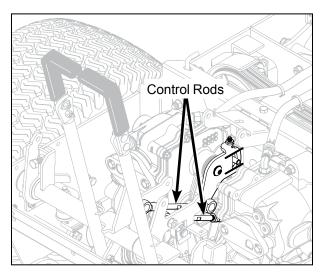


## **Actuator Rod Length Adjustment**

- 3. Block the tractor up so the drive tires are off the ground.
- With the FSC in NEUTRAL, start the engine. (Operate first at idle and then normal operating speed) and check for movement of drive wheels.

**NOTE:** If the engine will not start, check and adjust the neutral safety switch (see adjustment below).

5. With the FSC in the **NEUTRAL** position and the engine running, the wheels should not move. If a drive tire is moving, the Control Rod on that side is out of adjustment. Adjust that side to achieve neutral. Now both transaxles are in the neutral window.

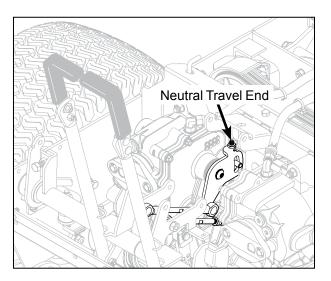


**Neutral Window** 

- 6. One at a time adjust the left and right Control Rods to find the center of the neutral window. Shorten the rods until the drive tire turns forward then lengthen it until the drive tire turns in reverse (approximately 1 turn). Position the rods halfway between forward and reverse. Tighten the jam nuts.
- 7. Lower drive tires onto ground.

Full Forward Speed Adjustment - Step 4

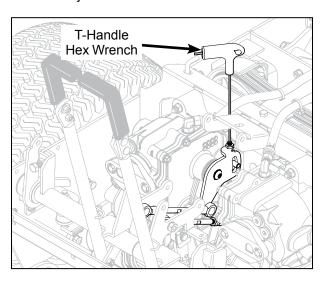
- Move the FSC to the full FORWARD speed position.
- Raise the body. The set screws in the left and right Transmission Control Arms should not be contacting the locating stud in the transaxle. If they are, back the set screws out until they do not touch.



**Neutral Travel End** 

Straight Tracking Adjustment - Step 5

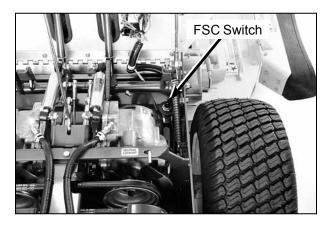
- Sit in the seat, start the engine, set throttle at full speed, and with the FSC in the NEUTRAL-PARK position check for movement of either drive wheel (if either wheel moves backward or forward, refer to the Neutral Position Adjustment - Step 3 and readjust).
- 2. Check for straight ground tracking on a level surface (with hands off the steering levers). Set the FSC at several different speeds and observe if the mower moves in a straight line (use cement joint or other line on ground for reference).
- If travel is not straight, shorten the control rod of the slow side (adjust in 1/8 turn increments) to match the faster side while maintaining the neutral position. If straight tracking and neutral can not be achieved, turn the control rod back to where neutral can be achieved.
- 4. Lengthen the control rod of the faster side (adjust in 1/8 turn increments) to match the slower side while maintaining the neutral position.
- 5. If the forward travel is straight throughout the speed range, except at maximum speed place the FSC in full FORWARD, turn the set screw in the Transmission Control Arm, of the faster side, in until it contacts the hydro stud. (Turning the set screw in slows the wheel.) Turn the set screw in an additional 1/8 turn. Recheck for equal full forward speed. Adjust this set screw until equal full forward speed is achieved. Tighten the jam nut.



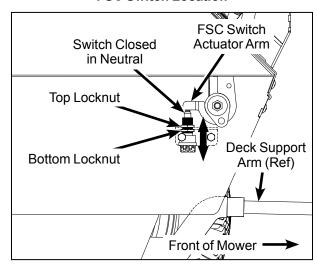
**Neutral Travel End Adjust** 

Neutral Switch Adjustment - Step 6

 Place the FSC in **NEUTRAL** position. Loosen the bottom locknut and adjust switch body up with top locknut until the switch contacts open. Turn the locknut an additional 1 turn. Tighten bottom locknut.



**FSC Switch Location** 



FSC Switch Adjustment (Side View Through Chassis)

Forward Speed Control Friction Adjustment - Step 7



**FSC Position With Levers** 

- Place the FSC in the full FORWARD position and pull both steering levers back; the FSC lever should not move. If the FSC lever moves back the friction needs to be increased.
- With the steering levers held back, move the FSC lever back from the FORWARD position. With a proper amount of friction adjusted, the FSC lever should move back with a slight amount of resistance (friction). If the FSC lever movement is "stiff", the friction needs to be decreased.
- The FSC friction is increased or decreased by tightening or loosening the friction adjustment nut. Loosen or tighten the nut and check the control function until the conditions of both steps 1 and 2 are met.

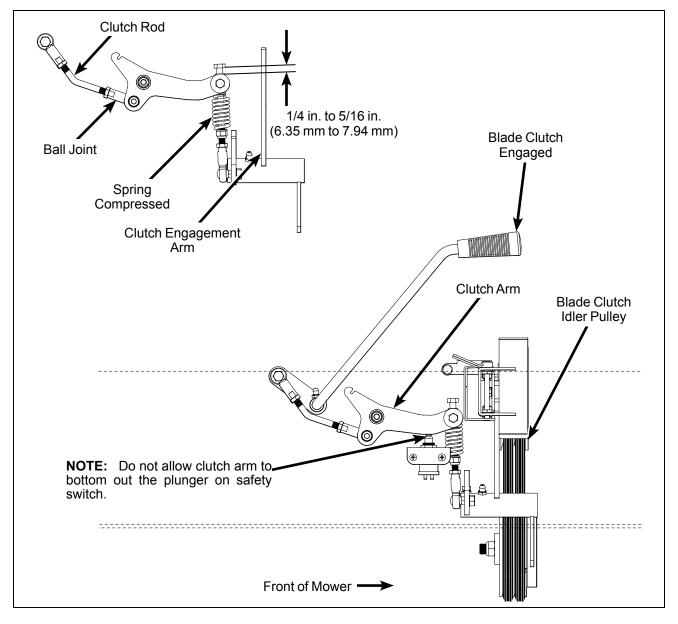
#### **Blade Clutch (PTO)**

Clutch Engagement/Belt Tension

The clutch engagement and PTO belt tension are adjusted using the clutch rod. Initially, after installing new PTO belts, after 10 hours and every 100 hours thereafter, check and adjust for the dimensions as shown in the PTO Clutch Engaged and PTO Clutch Disengaged illustrations.

Adjust the length of the clutch rod to achieve a bolt head clearance of 1/4 in. to 5/16 in. (6.35 mm to 7.94 mm) with the clutch engaged. To adjust length: remove ball joint from clutch arm, **shorten** the clutch rod to **decrease** this measurement or **lengthen** the clutch rod to **increase** this measurement. If adjustments are needed more frequently than every 100 hours to maintain dimensions, it may suggest problems with pulley wear or belt misalignment.

**NOTE:** Do not allow clutch arm to bottom out the plunger on safety switch. Adjust switch down if condition exists.



**PTO Clutch Engaged** 

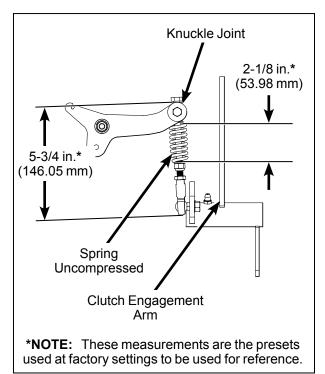
Clutch Disengagement/Brake Action



#### WARNING

It is important to check and maintain blade brake action for safe operation of the machine.

The **declutched or disengaged position** of the blade clutch idler pulley is adjustable and is set to give belt release **without excessive slack** and to apply the blade brake. The blade brake is activated by the brake band connected to the clutch engagement arm. The brake is designed to stop the blades within five (5) seconds after disengaging the clutch.



**PTO Clutch Disengaged** 

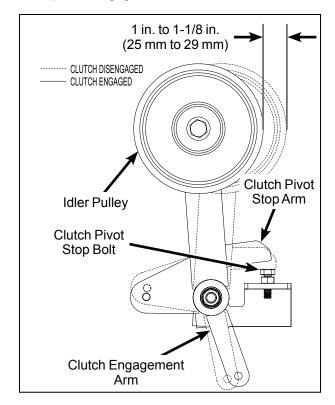
Use the following procedures to check and adjust clutch disengagement and brake action:

Idler Pulley Maximum Travel Adjustment - Step 1

Loosen the brake band adjustment nut allowing stop arm and stop nut to make contact (refer to **Blade Brake Band Adjustment** illustration).

- 1. Adjust the pivot stop bolt to give 1 in. to 1-1/8 in. (25 mm to 29 mm) pulley travel from "clutch engaged" to "clutch disengaged".
- Check and adjust the pulley travel, first engage the clutch, then measure the distance the pulley travels as the clutch is disengaged and the stop arm contacts the stop bolt.

**NOTE:** This adjustment will prevent excessive pulley travel that can cause belts to develop too much slack, causing possible belt derailment upon disengagement.



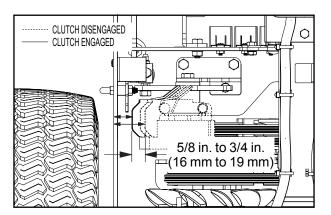
**Clutch Idler Pulley Travel** 

Blade Brake Band Adjustment - Step 2

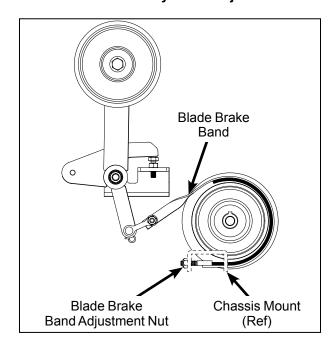
After the maximum pulley travel is set, adjust the working travel of the clutch idler pulley by adjusting the brake band nut and make the following adjustment as needed:

 Adjust the blade brake band, using the adjustment nut until pulley travel is approximately 5/8 in. to 3/4 in. (16 mm to 19 mm) from engaged to disengaged.

**NOTE:** As blade brake band/drum wears, pulley travel will increase and it will be necessary to adjust the blade brake band nut to maintain these dimensions.



**Clutch Idler Pulley Travel Adjustment** 

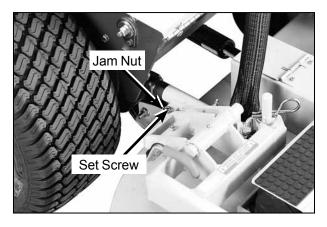


**Blade Brake Band Adjustment** 

- After adjustments are complete, check blade brake action as described in CHECKING/SER-VICING the Blade Brake Action in this section. If blades do not stop within five (5) seconds, check the following:
  - a. Make sure clutch and brake linkage are working freely (no binding).
  - b. Check the brake band lining.
  - c. Check the brake drum on the pulley. If excessive wear is present, it will be necessary to replace worn parts.

#### Tilt-Up Deck Adjustable Stop

When the carrier frame hinge joint is properly adjusted, the deck lock levers should move in and out of the engaged and disengaged positions freely. All four (4) hitch pins used for height adjustment should sit flush on the washers above the deck pin bushing. On a level surface, if any pin is sticking up (likely the front pins), tighten the opposite side or loosen the same side to lower the pin. Adjustments are made by loosening the jam nut and tightening or loosening the set screws on the Deck Mount Pivot Brackets. Retighten the jam nut when the adjustment is complete.



Tilt-Up Deck Adjustable Stop

#### **ELECTRICAL SYSTEM**

For troubleshooting, refer to the **WIRING SCHE-MATIC.** 

**IMPORTANT:** Disconnect both battery cables before unplugging any wiring connectors or making repairs on the electrical system.

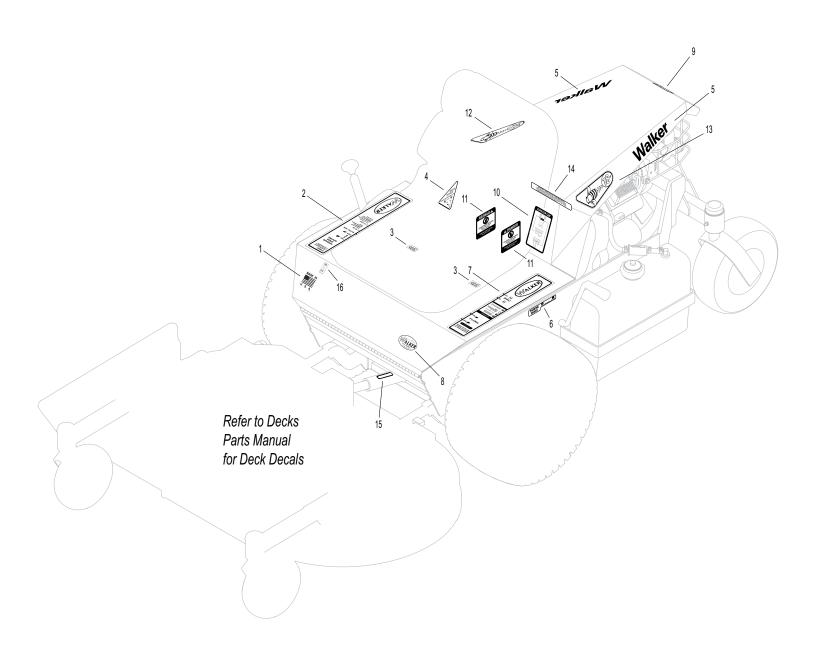
## TRACTOR DECALS

NO.	PART No.	DESCRIPTION	LOCATION	NO. REQ'D SD
Walk	er Product	and Operation Decals		
1 2 3 4 5 6	5856 5802-1 9804 4107-6 5800-6 4406-8	Made In USA RH Fender Axle Lockout PTO Clutch Decal, Walker 6-3/4" Decal, Parking Brake	Body Body, RH Side Near Seat Chassis Chassis Rear Body (one on each side) Chassis, LH	1 1 2 1 2
7 8	5802-2 5803	LH Fender Walker Manufacturing Logo Warning Decals Caution Decals	Body, LH Side Near Seat Body	1 1
9 10 11	5805 4107-10 4107-1	Caution, Engine Exhaust Decal, Belt Routing Danger, Rotating Components	Rear Body Rear Body, Underside Flex Coupling Guard, RH	1 1 2
Main	tenance D	ecals		
12 13 14 15	4105-8 4105-9 5855 6875	Decal/RH, 18HP Decal/LH, 18HP Important, Engine Cooling PTO Alignment Arrow	Rear Body, RH Side Rear Body, LH Side Engine Universal Joint Tube Assembly	1 1 1* 1
Optio	on Decals (	applied only to units with corres	oonding Options installed)	
16	5877	Lights, On-Off	Body	1

<sup>\*</sup> Item used on Model MBK only

**NOTE:** All parts requiring decals are shipped with decals applied.

## TRACTOR DECALS



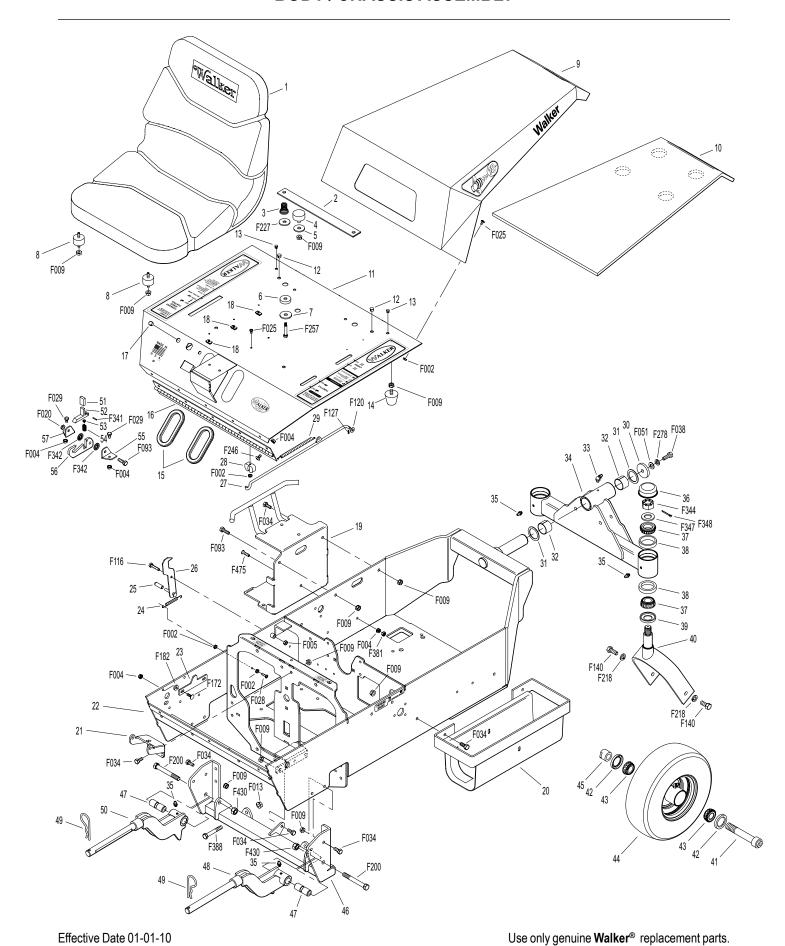
## **BODY / CHASSIS ASSEMBLY**

1 2 3	ssembly 5103			NO.	NO.		REQ'D
1 2 3				Deck	Support Ar	m & Hitch Assemblies	
3	5105	Seat	1	46	4300-13	Deck Arm Support Mount	1
3	7203	Seat Spring Plate	1	47	6840-1	Support Arm Bushing (2-1/16)	2
	7223-1	Compression Spring	2	48	4431-1	Deck Support Arm/LH (Includes Item #3	
4	7845	Rubber Bumper (1.375 x .63)	2	49	5775-2	Hitch Pin (#6)	2
5	5841	Retainer Washer (3/8 x 1-1/4)	2	50	4430-1	Deck Support Arm/RH (Includes Item # 3	
6	7434	Washer (3/8 x 1-1/4 x 1/4)	2		p Latch Ass		50) 1
7	5841-1	Retainer Washer	2	51	5847	Plastic Tip	1
8	7440-5		2	52	5744-20	Spring Arm, Tilt-Up Latch	1
		Shock Mount (1-1/4 x 3/4)	2	53	5744-20 5744-10		1
-	Assembly	Door Dody (Included Hors # 10)	4			Spring Pivot Bushing	1
9	4105-2	Rear Body (Includes Item # 10)	l 4	54	5744-15	Compression Spring (3/8 x 5/8)	l 4
10	4190-2	Insulation Foam Pad	1	55	5744-13	Mount Angle, LH	1
11	4100-1	Front Body	1	56	5744-12	Hook, Tilt-Up Latch	1
12	5989-4	Dome Plug (3/8)	2	57	5744-14	Mount Angle, RH	1
13	5989-3	Dome Plug (5/16)	2	Faste			
14	5845	Rubber Bumper (1.50 x 1.25)	2		F002	10-24 Keps Nut	8
15	5180	Edge Molding/Lever Opening	2		F004	1/4-20 Keps Nut	13
16	4504-3	Hinge (19")	1		F005	1/4-20 ESNA Nut	1
17	5989-5	Dome Plug (7/16)	1		F009	5/16-18 Whiz Locknut	16
18	7834-3	Wire Saddle (3 Wires)	3		F013	3/8-16 Whiz Locknut	2
Chass	is Assemb	ly			F020	5/16-18 ESNA Nut	1
19	4010-8	Precleaner / Battery Mount	1		F025	10-24 x 3/8 PPHMS	6
20	9046	Gas Tank Mount	1		F028	10-24 x 3/4 PPHMS	1
21	4215-7	Steering Dampener Mount	1		F029	1/4-20 x 1/2 Hex Bolt	2
22	4300-15	Chassis Frame / MBV	1		F034	5/16-18 x 3/4 Hex Bolt	10
	4300-12	Chassis Frame / MBK	1		F038	3/8-16 x 1 Hex Bolt	1
23	4102	Body Guide	1		F051	3/8 SAE Washer	1
24	7222	Extension Spring (1/4 x 3)	1		F093	5/16-18 x 1 Hex Bolt	2
2 <del>5</del>	7854	Plastic Tip, Red	1		F116	1/4-20 x 1-1/4 Hex Bolt	1
26 26	7383-1	·	1		F120	AN960416 Washer	1
		Body Latch Hook	1				1
27	4145	Body Support Rod	1		F127	1/16 x 1/2 Cotter Pin	1
28	4145-1	Spring Clip	1		F140	7/16-14 x 1 Hex Bolt	2
29	5223	Extension Spring (1/4 x 5-1/2)	1		F172	1/4-20 x 3/4 Carriage Bolt	2
•		el Assembly			F182	1/4 x 5/8 x 1/8 Washer	2
30	4401-4	Washer (1-3/4 x 3/8 x 1/4 Thk)	1		F200	7/16-20 x 3 Grade 8 Bolt	2
31	4301-2	Fiberglide Thrust Washer	2		F218	7/16 Split Lock Washer	2
32	4301-3	Fiberglide Bearing	2		F227	3/8 x 1-1/4 x 1/8 Washer (Plastic)	2
33	5830-3	Grease Fitting (45 Deg.)	1		F246	1/4-20 x 1/2 PTHMS	8
34	4301	Tail Wheel Pivot (Includes Items # 33 & 35)	1		F257	3/8 x 1-11/16 Shoulder Bolt	2
35	5830	Grease Fitting	4		F278	3/8 Split Lock Washer	1
36	8769-8	Dust Cap, Deck Caster	2		F341	Coil Roll Pin (7/64 x 9/16)	1
37	8769-6	Bearing Cone (1" ID)	4		F342	5/16 Conical Washer	2
38	8769-5	Bearing Cup (2 x 1-5/8)	4		F344	3/4-16 Slotted Hex Nut	2
39	8769-7	Seal	2		F347	3/4 SAE Washer	2
40	8765-10	Caster Wheel Fork	2		F348	1/8 x 1-1/2 Cotter Pin	2
41	8767	Axle, Caster Wheel (5-1/8)	2		F381	1/4-20 Hex Nut	1
42	8768-2	Seal, Reverse Lip	4		F388	3/8-16 x 2-1/2 Hex Bolt	2
43	8037	Bearing Cone (3/4 ID)	4		F430	7/16-20 ESNA Nut	2
43 44	8768	Caster Wheel, Pneumatic (11 x 4.00-5)	2		F475	1/4-20 x 1 PFH Screw	1
77	8768-3	` ,	∠ *	* (	Service Part		ı
		Tire, Pneumatic (11 x 4.00-5)	*			Only It-Up Latch Assembly Kit available by o	ordering
45	8768-5 8766	Caster Wheel (5 x 3) Axle Nut (3/4-16)	2		kit # 5747.	it op Later Assembly Nit available by 0	acing

Use only genuine **Walker**® replacement parts.

Effective Date 01-01-10

### **BODY / CHASSIS ASSEMBLY**

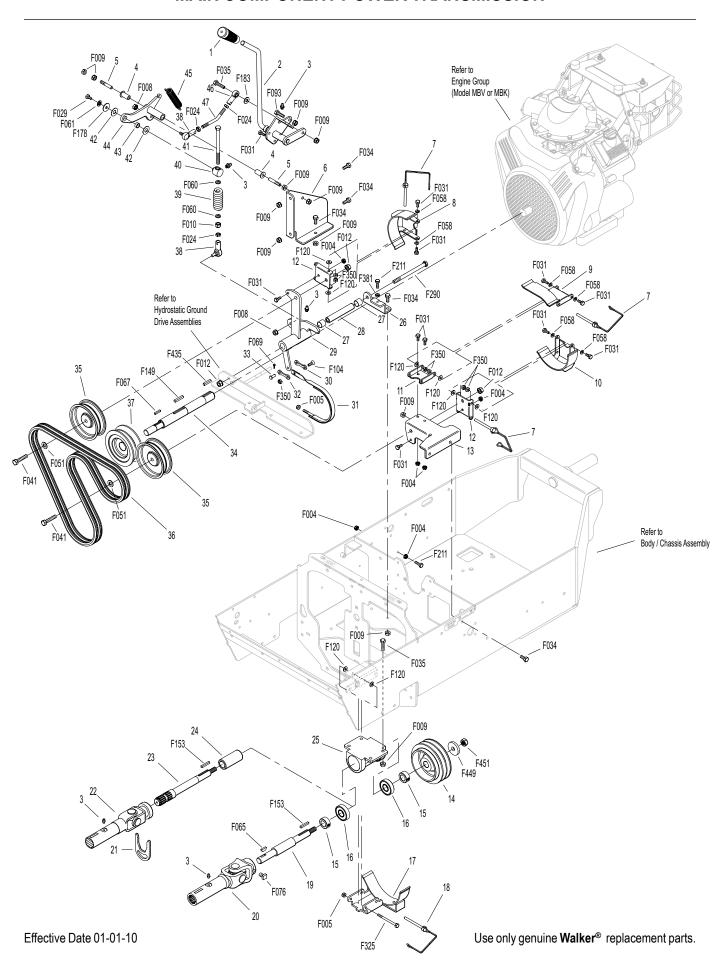


75

## MAIN COMPONENT POWER TRANSMISSION

NO.	PART NO.	DESCRIPTION	NO. REQ'D	NO.	PART NO.	DESCRIPTION	NO. REQ'D
ΡΤΟ Ι	Drive Asser	mhlv		45	5221	Extension Spring (3/4 x 4)	1
	DIIVO AGGOI	illory		46	5214-4	Ball Joint (5/16-24) W/O Stud	1
1	4850	Handle Grip	1	47	4358-10	Clutch Rod	1
2	4358-2	Clutch Lever	1	• • •	1000 10	oldtori rtod	
_	1000 2	(Includes Items # 1 & 3)		Fast	eners		
3	5830	Grease Fitting	3		0.1.01.0		
4	5103-2	Pivot Bushing (5/16 ID)	2		F004	1/4-20 Keps Nut	7
5	2358-6	5/16-18 x 1-3/4 Stud	2		F005	1/4-20 ESNA Nut	2
6	4358-11	Clutch Pivot Plate	1		F008	5/16-24 Keps Nut	2
7	7775-6	Wire Lock Pin (2-1/2")	3		F009	5/16-18 Whiz Locknut	17
8	4302	Right Hand Shoe	1		F010	5/16-24 ESNA Nut	1
9	4302-5	Upper Shoe, LH	1		F012	3/8-16 Keps Nut	2
10	4302-1	Left Hand Shoe	1		F024	5/16-24 Jam Nut	3
11	2302-6	Shoe Mount, LH	1		F029	1/4-20 x 1/2 Hex Bolt	1
12	4302-2	Shoe Mount	2		F031	1/4-20 x 5/8 Hex Bolt	10
13	4325-11	Idler Mount	1		F034	5/16-18 x 3/4 Hex Bolt	5
14	4236-3	PTO Drive Pulley (5/AA)	1		F035	5/16-18 x 1-1/4 Hex Bolt	6
15	4274-9	Collar (3/4")	2***		F041	3/8-16 x 1-3/4 Hex Bolt	2
16	4274-8	Bearing (3/4")	2		F051	3/8 SAE Washer	2
17	4302-4	PTO Shoe	1		F058	1/4 Wave Spring Washer	6
18	7775-7	Wire Lock Pin (3")	1		F060	AN960516 Washer	2
19	4274-11	PTO Drive Shaft 3/4"	1		F061	1/4 Star Lock Washer	1
13	4274-11	PTO Drive Shaft Assembly	*		F065	3/16 x 3/4 Woodruff Key (#606)	1
	4274-10	(Includes Items # 15, 16, 19 & 25)			F067	3/16 x 3/16 x 1 Key	1
20	5275-15	,	1		F069	3/32 x 1/2 Cotter Pin	1
20	3273-13	U-Joint Tube / 9.5" OAL / Spline (Includes Item # F076)	ı		F009 F076	3/8-16 x 5/8 SQH Set Screw	1
21	7275-9		1**		F076 F093	5/16-18 x 1 Hex Bolt	1
21 22	7275-9 7275-16	Quick Coupler Installation Tool	1**		F104	1/4-20 x 3/4 PFH Bolt	1
23	4274-13	Universal Joint Tube Assembly / Spline PTO Drive Shaft	1 1**		F104 F120	AN960416 Washer	0
23	4274-13		*		F120 F149		8
	4214-12	PTO Drive Shaft Assembly / Spline			F149 F153	1/4 x 1/4 x 1-1/2 Key	1
24	4274-14	(Includes Item # 15, 16 & 23-25)	1**			3/16 x 3/16 x 1-1/4 Key	2
24		Spacer	•		F178	1/4 x 1 Fender Washer	1
25	4274-7	PTO Bearing Housing	1		F183	.312 x .700 x .074 Washer	1
26	4358-7	Clutch / Pivot Stop	1		F211 F290	1/4-20 x 7/8 Hex Bolt	2
27	7201-3	Fiberglide Bearing	2			3/8-16 x 5 Hex Bolt	1
28	7201-8	Inner Race (4")	1		F325	1/4-20 x 3 Hex Bolt	2
29	4359	Clutch Engagement (Includes Item # 3)	1		F350	1/4-20 LP Nylock	1
30	4359-2	Brake Band Link / Rear	1		F381	1/4-20 Hex Nut	1
31	8304	Brake Band (14-1/2)	1		F435	1/4 x 1/4 x 1-1/4 Key	1
32	4359-1	Brake Band Link / Front	1		F449	Washer 1/2 x 1-5/8 x 1/4	1
33	7523-2	Clevis Pin W/Hole (1/4 x 5/8)	1		F451	1/2-20 Nylon Locknut	1
34	4411-2	Drive Shaft	1	*	0 ' D (	0.1	
35	4245-1	Idler Pulley (4/Flat)	2		Service Part	Only	
36	4230-1	Engine/PTO Belt/Matched Set	1	**		M. L.IMBIC. I	
37	4236-4	Idler Pulley (4/AA)	1	***	Items used o	n Model MBK only	
38	5214-2	Ball Joint (5/16-24) (Nylon Lined)	2	***	M LIMBIA	6 (4)	
39	5226-1	Spring (3/4 x 2-1/2)	1		Model MBK i	uses a quantity of one (1)	
40	7380	Knuckle Joint	1				
41	4303-7	Clutch Actuator Bolt (5/16)	1				
42	7377	Plastic Washer (1 x .438.025)	2				
43	7378	Pivot Bearing (7/16 x 9/16)	1				
44	4325-1	Clutch Arm	1				

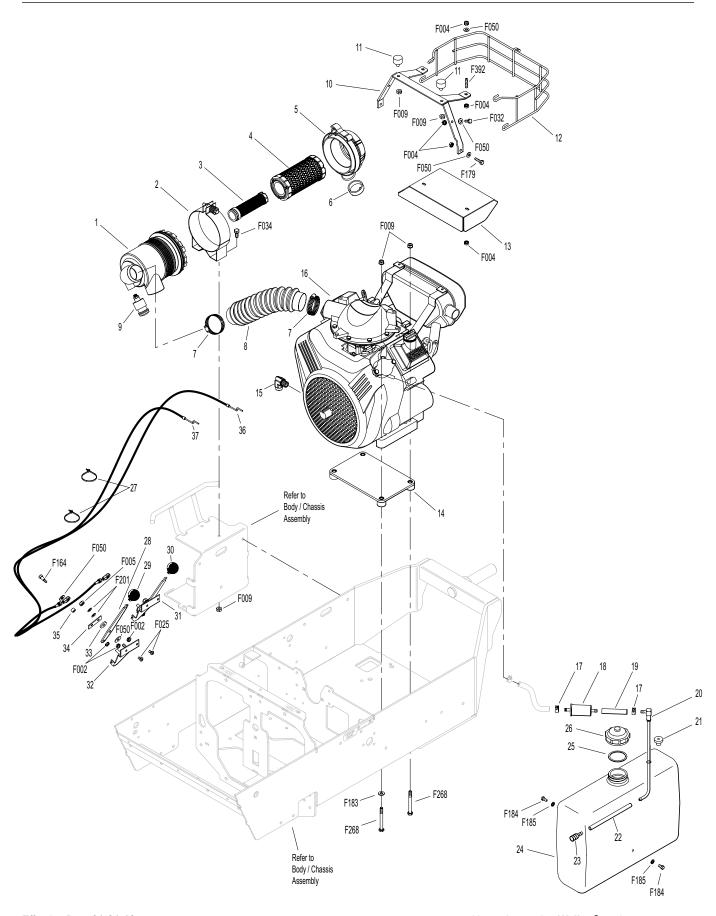
#### MAIN COMPONENT POWER TRANSMISSION



# **ENGINE GROUP (MODEL MBV)**

NO.	PART NO.	DESCRIPTION	NO. REQ'D	NO.	PART NO.	DESCRIPTION	NO. REQ'D
Precl	eaner Asse	mbly		Chok	e and Throt	ttle Assemblies	
1	4088-10	Air Cleaner Assembly	1	27	5975-3	Cable Tie (50# x 7")	2
		(Includes Items # 2-6 & 9)		28	5108-1	Control Lever, Throttle/Choke	2
2	2088-1	Air Cleaner Band	1	29	5108-5	Throttle Control Knob, Red	1
3	2090-3	Safety Filter Insert	1	30	5108-6	Choke Control Knob, Black	1
4	2090-1	Air Cleaner Cartridge	1	31	7108	Control Assembly	2
5	2088-2	Air Cleaner Cap	1		4108-4	Throttle Control and Cable	*
6	2090-2	Vacuator Valve	1			Assembly (Includes Item # 29)	
7	7840	Hose Clamp (1-5/16 to 2-1/4)	2		4109-4	Choke Control and Cable	*
8	2012	Flex Hose (1-3/4 x 2)	1			Assembly (Includes Item # 30)	
9	5091-11	Air Flow Indictor & Nipple	1	32	5108-8	Control Bracket	2
				33	5108-10	Friction Washer (.125)	2
Engir	ne Assembl	у		34	5108-7	Control Lock Tab	2
				35	5172	Bearing, Nylon (.255 ID x .379 OD x .250	) 1
10	4104-1	Body Support	1	36	4109-3	Control Cable (66")	1
11	4845	Rubber Bumper (1.0 x .625)	2	37	4109-5	Control Cable (71")	1
12	4013-1	Muffler Guard	1			,	
13	4104-9	Heat Shield, Aluminum	1	Faste	eners		
14	4300-14	Engine Spacer Plate	1				
15	4010-5	3/8 NPT Street L	1		F002	10-24 Keps Nut	6
16	NS	18 HP Engine	1		F004	1/4-20 Keps Nut	10
		(Briggs & Stratton 3564470236G1)			F005	1/4-20 ESNA Nut	2
		,			F009	5/16-18 Whiz Locknut	8
Fuel '	Tank Assem	nbly			F025	10-24 x 3/8 PPHMS	4
		•			F032	1/4-20 x 3/4 Hex Bolt	2
17	5879-3	Hose Clamp (1/2)	2		F034	5/16-18 x 3/4 Hex Bolt	2
18	5020	Fuel Filter	1		F050	1/4 SAE Washer	10
19	5086-8	Hose (1/4 x 2-1/2)	1		F164	10-24 x 1/4 x 3/8 SHL Bolt	2
20	5083-6	Tank Tube Elbow	1		F179	1/4-20 x 1 Hex Bolt	2
21	5083-1	Bushing, Rubber (Fits 5083)	1		F183	.312 x .700 x .074 Washer	2
22	5086-7	Hose (1/4 x 6)	1		F184	1/4-20 x 1/2 Hex Bolt, SS	2
23	5020-2	Fuel Filter, In Tank	1		F185	1/4 Internal Star Lock Washer	2
24	4046	Fuel Tank, 3.0 Gal. Gas	1		F201	1/4 Belleville Spring Washer	4
		(Fuel Cap Centered)			F268	5/16-18 x 3 Hex Bolt	4
		(Includes Items # 25 & 26)			F392	1/4-20 x 1 Set Screw/SS Cup Point	2
25	5082-2	Fuel Cap Seal	1				_
26	5082	Fuel Tank Cap (Includes Item # 25)	1	* (	Service Part	Only	

## **ENGINE GROUP (MODEL MBV)**



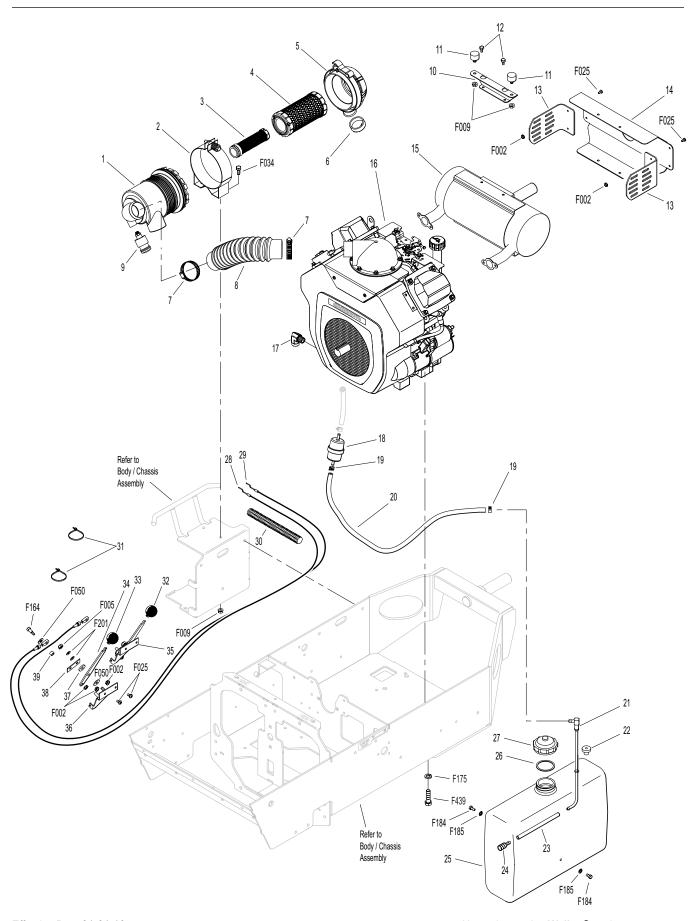
Effective Date 01-01-10

Use only genuine Walker® replacement parts.

# **ENGINE GROUP (MODEL MBK)**

NO.	PART NO.	DESCRIPTION	NO. REQ'D	NO.	PART NO.	DESCRIPTION	NO. REQ'D
Precl	eaner Asse	mbly		Chok	e and Throt	tle Assemblies	
1	4088-10	Air Cleaner Assembly	1	28	4108-3	Control Cable (64")	1
		(Includes Items # 2-6 & 9)		29	2108-4	Control Cable (68")	1
2	2088-1	Air Cleaner Band	1	30	8123	Insulating Sleeve (3/8 x 6)	1
3	2090-3	Safety Filter Insert	1	31	5975-3	Cable Tie (50# x 7")	2
4	2090-1	Air Cleaner Cartridge	1	32	5108-6	Choke Control Knob, Black	1
5	2088-2	Air Cleaner Cap	1	33	5108-5	Throttle Control Knob, Red	1
6	2090-2	Vacuator Valve	1	34	5108-1	Control Lever, Throttle/Choke	2
7	7840	Hose Clamp (1-5/16 to 2-1/4)	2	35	7108	Control Assembly	2
8	2012	Flex Hose (1-3/4 x 2)	1		4108-2	Throttle Control and Cable	*
9	5091-11	Air Flow Indictor & Nipple	1			Assembly (Includes Item # 33)	
					4109-1	Choke Control and Cable	*
Engir	ne Assembl	у				Assembly (Includes Item # 32)	
				36	5108-8	Control Bracket	2
10	2104	Body Support	1	37	5108-10	Friction Washer (.125)	2
11	4845	Rubber Bumper (1.0 x .625)	2	38	5108-7	Control Lock Tab	2
12	NS	Kohler Bolt	2	39	5172	Bearing, Nylon (.255 ID x .379 OD x .250)	1
13	2013-4	Shield Side	2				
14	2013-3	Muffler Heat Shield	1	Faste	eners		
15	NS	Muffler	1				
16	NS	18 HP Engine (Kohler)	1		F002	10-24 Keps Nut	6
17	4010-5	3/8 NPT Street L	1		F005	1/4-20 ESNA Nut	2
					F009	5/16-18 Whiz Locknut	4
Fuel	Tank Assem	ıbly			F025	10-24 x 3/8 PPHMS	8
					F034	5/16-18 x 3/4 Hex Bolt	2
18	5020	Fuel Filter	1		F050	1/4 SAE Washer	4
19	5879-3	Hose Clamp (1/2)	2		F164	10-24 x 1/4 x 3/8 SHL Bolt	2
20	5086-16	Hose (1/4 x 28)	1		F175	1/2 Split Lock Washer	4
21	5083-6	Tank Tube Elbow	1		F184	1/4-20 x 1/2 Hex Bolt, SS	2
22	5083-1	Bushing, Rubber (Fits 5083)	1		F185	1/4 Internal Star Lock Washer	2
23	5086-7	Hose (1/4 x 6)	1		F201	1/4 Belleville Spring Washer	4
24	5020-2	Fuel Filter, In Tank	1		F439	1/2-13 x 1-3/4 Hex Bolt	4
25	4046	Fuel Tank, 3.0 Gal. Gas	1				
		(Fuel Cap Centered)		* (	Service Part	Only	
		(Includes Items # 26 & 27)					
26	5082-2	Fuel Cap Seal	1				
27	5082	Fuel Tank Cap	1				
		(Includes Item # 26)					

# **ENGINE GROUP (MODEL MBK)**



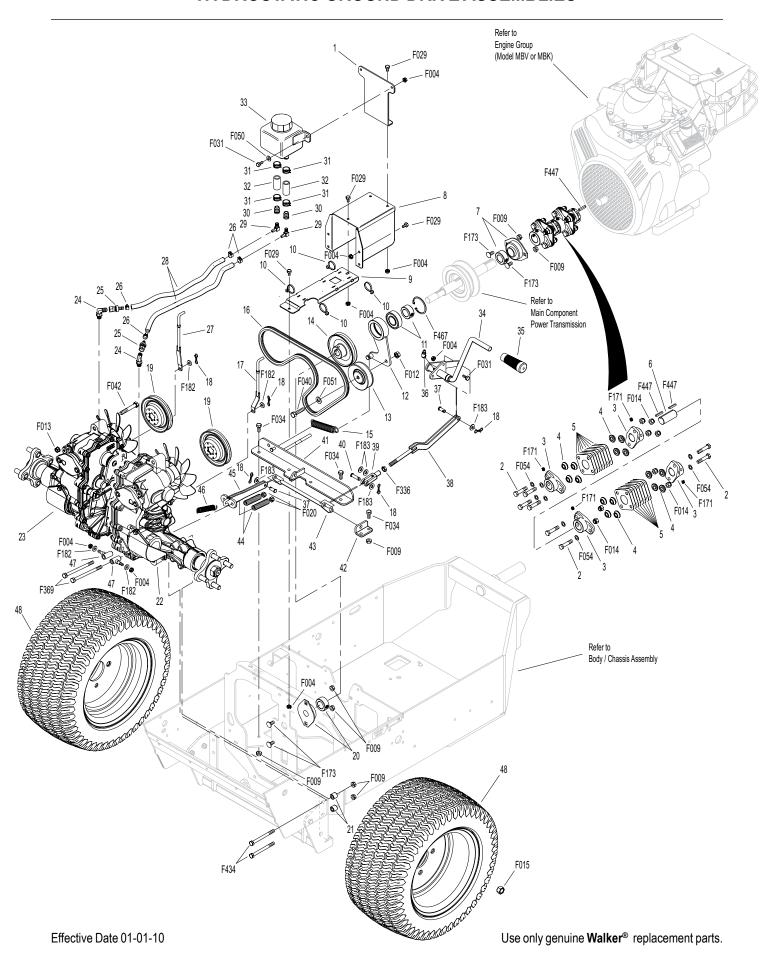
Effective Date 01-01-10

Use only genuine **Walker®** replacement parts.

## **HYDROSTATIC GROUND DRIVE ASSEMBLIES**

ITEM No.	PART NO.	DESCRIPTION	NO. REQ'D	NO.	PART NO.	DESCRIPTION	NO. REQ'D
Grou	nd Drive As	semblies		Whee	el Assembl	у	
1	4025-6	Bottle Mount	1	48	5075-1	LP Wheel & Tire Assembly (18 x 8.50-10	) 2
2	2350-13	3/18-16 x 1-3/4 Bolt Grade 5	8		5075-2	LP Tire (18 x 8.50-10)	/ <del>*</del>
3	2350-1	Hub, Coupler End	4		5075-5	LP Wheel (10 x 7)	*
4	2350-15	Spacer Bushing	16		5033-6	Wheel & Tire (18 x 7.00-8)	**
5	2350-16	Flex Plate	16		5030-6	Standard Tire (18 x 7.00-8)	*
6	4350-12	Coupling Shaft	1		5031-2	Standard Wheel (8 x 5.5)	*
7	4349-6	Flanged Bearing 1"	1		5030-4	Tire Tube (18 x 8.50-8)	*
8	4010-2	Flex Coupling Guard	1			1110 1 abs (10 x 5.55 5)	
9	4025-7	Hose Channel	1	Faste	eners		
10	5975-3	Cable Tie (50# x 7")	4		F004	1/4-20 Keps Nut	15
11	5270	Bearing W/Collar (1")	1		F009	5/16-18 Whiz Locknut	12
12	4411-1	Idler Bearing Housing	1		F012	3/8-16 Keps Nut	1
13	4245	Idler Pulley (3/A)	1		F013	3/8-16 Whiz Locknut	2
14	4240-1	Drive Pulley	1		F014	3/8-16 ESNA Nut	8
15	5221	Extension Spring (3/4 x 4)	1		F014 F015	1/2-20 Wheel Lug Nut	8
16	4248	Ground Drive Belt	1		F020	5/16-18 ESNA Nut	2
17	2028-3	Hydro Lockout Rod, LH	1		F020 F029	1/4-20 x 1/2 Hex Bolt	8
18	4407-4	Bow Tie Cotter Pin	5				
19	4407-4 4026-9		5 2		F031	1/4-20 x 5/8 Hex Bolt	5
		Pulley (52364)	4		F034	5/16-18 x 3/4 Hex Bolt	4
20	4349-4	Flanged Bearing 3/4"	1		F040	3/8-16 x 1-1/2 Hex Bolt	1
21	9430-1	Spacer Tube	4		F042	3/8-16 x 2-1/4 Hex Bolt	2
22	2025-20	Hydro-Gear W/Charge Pump, LH	1		F050	1/4 SAE Washer	2
23	2026-20	Hydro-Gear W/Charge Pump, RH	1		F051	3/8 SAE Washer	1
24	2025-16	Elbow Fitting	2		F054	AN960616 Washer	8
25	2025-15	Hose Fitting	2		F171	5/16-18 x 3/8 Set Screw	4
26	5879-3	Hose Clamp (1/2)	4		F173	5/16-18 x 3/4 Carriage Bolt	4
27	2028-4	Hydro Lockout Rod, RH	1		F182	1/4 x 5/8 x 1/8 Washer	4
28	8015	Hose (1/4 x 14-1/2)	2		F183	.312 x .700 x .074 Washer	5
29	4024-1	Oil Expansion Reservoir Elbow	2		F336	3/8-16 Jam Nut	1
30	2010-9	Hose Reducer 1/2-1/4	2		F369	5/16-18 x 4-1/2 Hex Bolt	2
31	5879-8	Hose Clamp (13/16)	4		F434	5/16-18 x 3-1/2 Hex Bolt	4
32	5087-1	Hose (1/2 x 1-3/4)	2		F447	1/4 x 1/4 x 1 Key	3
33	2025-1	Oil Expansion Reservoir (71327)	1		F467	2" Internal Snap Ring	1
Parki	ng Brake A	ssembly		*	Service Par	t Only	
34	4406	Parking Brake Lever	1				
		(Includes Items # 35 & 36)		**	May be ord	ered as a factory-installed option or for dea	aler in-
35	2850	Handle Grip, Red	1	;	stallation. N	arrow Drive Tires are used when installing	j a 36"
36	5830-3	Grease Fitting (45 Deg.)	1		Deck. Conta	act your Walker dealer.	
37	8655-4	Clevis Pin (5/16 x 3/4)	2				
38	4406-12	Brake Actuator Pull	1				
39	2280	Clevis (3/8)	1				
40	2406-4	Clevis Pin (5/16 x 1-1/8)	1				
41	4406-5	Parking Brake Mount	1				
42	4401-8	Parking Brake Pivot	1				
43	4406-13	Parking Brake Actuator	1				
44	5665-1	Compression Spring (2-1/2)	2				
45	4406-0	Parking Brake Link	1				
46	5222	Extension Spring (1/2 x 3-1/4)	1				
47	5463	Steering Lever Actuator	2				

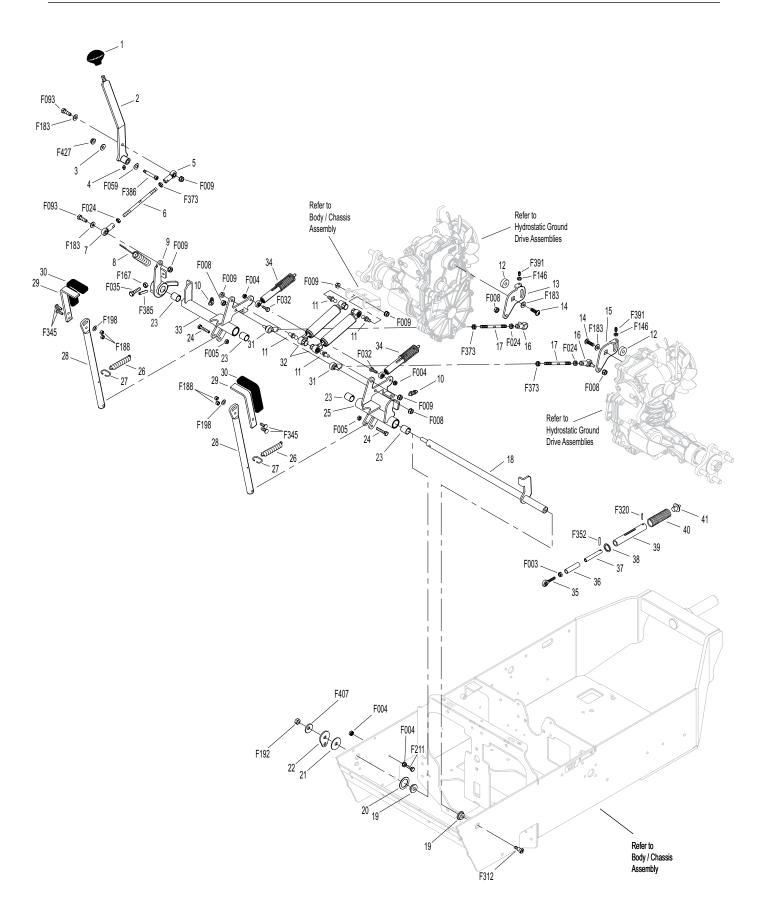
## **HYDROSTATIC GROUND DRIVE ASSEMBLIES**



## STEERING CONTROL ASSEMBLIES

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Steer	ing Lever &	FSC Assemblies		Faste	eners		
1	5862	FSC Knob	1				
2	4170	FSC Lever Assembly (Includes Item #4)	*		F003	1/4-28 Hex Nut	2
3	2170-1	Step Washer	2		F004	1/4-20 Keps Nut	4
4	5830	Grease Fitting	1		F005	1/4-20 ESNA Nut	2
5	5214-5	Ball Joint (5/16-24/LH) W/O Stud	1		F008	5/16-24 Keps Nut	4
6	4173	Control Rod (5-3/8)	1		F009	5/16-18 Whiz Locknut	6
7	5214-4	Ball Joint (5/16-24) W/O Stud	1		F024	5/16-24 Jam Nut	3
8	4219	Extension Spring (3/4 x 6-1/2)	1		F032	1/4-20 x 3/4 Hex Bolt	2
9	4451-4	FSC Friction Actuator	1		F035	5/16-18 x 1-1/4 Hex Bolt	1
10	5830-3	Grease Fitting (45 Degree)	2		F059	3/8 Wave Spring Washer	1
11	5146	10mm Ball Stud	4		F093	5/16-18 x 1 Hex Bolt	2
12	2212	Transmission Control Arm Stop	2		F146	1/4-20 Jam Nut	2
13	2212-2	Transmission Control Arm, RH	1		F167	5/16-18 Hex Nut	1
14	2025-10	TWHCS 5/16-24 x 1.0 (Patch)	2		F183	.312 x .700 x .074 Washer	4
15	2212-1	Transmission Control Arm, LH	1		F188	1/4-20 Self-Locking Nut	4
16	5214-2	Ball Joint (5/16-24) (Nylon Lined)	2		F192	3/8-24 Self-Locking Nut	1
17	4213-1	Control Rod (4-1/2)	2		F198	.250 x .625 x .040 Washer, SS	2
18	4451-1	Steering Pivot Shaft W/Stop	1		F211	1/4-20 x 7/8 Hex Bolt	1
19	9704-3	Pivot Rod Bushing/Plastic	2		F312	3/8 x 3/8 Shoulder Bolt	1
20	4142-2	FSC Friction Washer	1		F320	1/8 x 3/4 Split Spring Pin	2
		(1-1/2 x 1-1/32 x 1/16)			F345	1/4-20 x .770 Knurled Bolt	4
21	5141	FSC Friction Washer (1-1/2 x 3/8 x 1/16)	1		F352	5/32 x 1 Heavy Duty Roll Pin	2
22	4142-1	FSC Cam	1		F373	5/16-24 Hex Nut, LH	3
23	8201-3	Fiberglide Bearing	4		F385	1/4 x 1-1/4 Roll Pin	1
24	4452-6	Steering Pivot (1/4-20 x 1-1/2)	2		F386	5/16-18 x 1-1/2 x 3/8 Shoulder Bolt	1
25	4451-5	Speed Control Actuator, LH	1		F391	1/4-20 x 1/2 Set Screw, SS	2
		(Includes Item # 23)			F407	Belleville Washer 3/8 x 1.187 SS	1
26	5222	Extension Spring (1/2 x 3-1/4)	2		F427	5/16-18 Flange Nut	1
27	5450	D-Clip	2			· ·	
28	4452-4	Steering Lever Tube W/Tab	2	*	Service Pa	art Only	
29	5453-10	Steering Lever Handle/Adjustable	2			•	
20	5850-2	(Includes Items # 30 & F345)	2				
30	5050-2 5214-3	Handle Grip, Foam (5-1/2)	2				
31 32	2215-5	Ball Joint (5/16-24LH) (Nylon Lined)	2				
32 33	4451-6	Steering Lever Dampener Speed Control Actuator, RH	2 1				
33	4431-0	(Includes Item # 23)	I				
Trans	smission Sp	oring Assemblies					
34	4199-1	Transmission Spring Assembly	*				
		(Includes Items # 35-41, F320 & F352)					
35	4552	Ball Joint (1/4-28)	2				
		(Includes Item # F003)					
36	5194	Plunger Sleeve	2				
37	5192-2	Spring Plunger (Female)					
38	5193	Washer (3/4 x 1 x .085)	2 2				
39	6191	Spring Slide (4-3/4)	2				
40	5195-3	Compress Spring (1 x 5-1/16)	2				
41	6196	Spring Slide Cap	2				
41	6196	Spring Slide Cap	2				

### STEERING CONTROL ASSEMBLIES



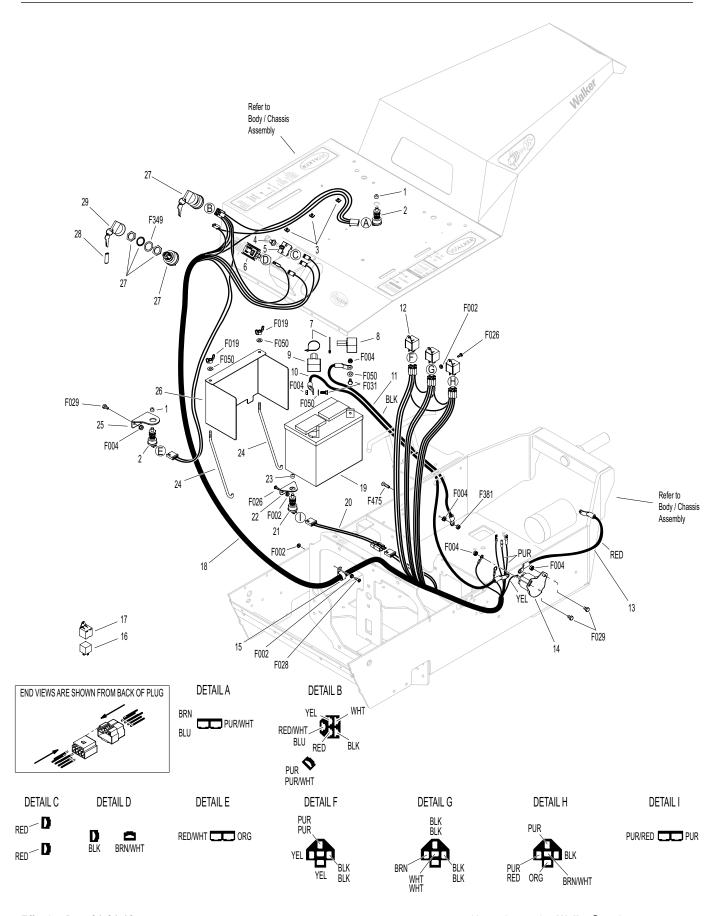
Effective Date 01-01-10

Use only genuine Walker® replacement parts.

# ELECTRICAL ASSEMBLY (MODEL MBV)

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Elect	rical Asser	nbly		Faste	eners		
1	5942-1	Switch Boot (Fits P/N 5942)	2		F002	10-24 Keps Nut	5
2	5942	Safety Switch (NO)	2		F004	1/4-20 Keps Nut	2
3	7834-3	Wire Saddle (3 Wires)	3		F019	1/4-20 ESNA Wing Nut	2
4	7941-3	Boot, Circuit Breaker	1		F026	10-24 x 1/2 PPHMS	4
5	7941-6	Circuit Breaker (15AMP)	1		F028	10-24 x 3/4 PPHMS	1
6	8990-1	Hourmeter (Sendec)	1		F029	1/4-20 x 1/2 Hex Bolt	3
7	5975-1	Cable Tie (18# x 3-3/4")	2		F031	1/4-20 x 5/8 Hex Bolt	2
8	5932	Battery Terminal Insulation Black (-)	1		F050	1/4 SAE Washer	4
9	5933	Battery Terminal Insulation Red (+)	1		F349	Washer .835 ID 1.122 OD, SS	1
10	4940-5	Battery Cable 25"	1		F381	1/4-20 Hex Nut	1
11	6923	Battery Cable (-)	1		F475	1/4-20 x 1 PFH Screw	1
12	6942	Relay Switch 30/40AMP (NC)	3				
		(Includes Items # 16 & 17)		*	Service Pa	rt Only	
13	4940-8	Starter Solenoid Cable	1			•	
14	4929	Starter Solenoid	1				
15	5835	Cable Clamp (3/4)	1				
16	6941-6	Relay Switch 30/40AMP	*				
17	6941-7	Relay Mount	*				
18	4940-1	Wire Harness	1				
19	7910	Battery (12V/275CCA/Dry)	1				
20	4940-2	Wire Harness Extension	1				
21	5941	Safety Switch (NC)	1				
22	4359-3	Switch Mount / Clutch	1				
23	5941-1	Switch Boot (Fits P/N 5941)	1				
24	5839	Hook Bolt	2				
25	4024-12	Switch Mount	1				
26	4910-4	Battery Cover	1				
27	8960-15	Ignition Switch W/Keys (Includes Items # 28, 29 & F349)	1				
28	7854	Plastic Tip, Red	1				
29	8960-3	Key Set W/Umbrella	1				

## **ELECTRICAL ASSEMBLY (MODEL MBV)**



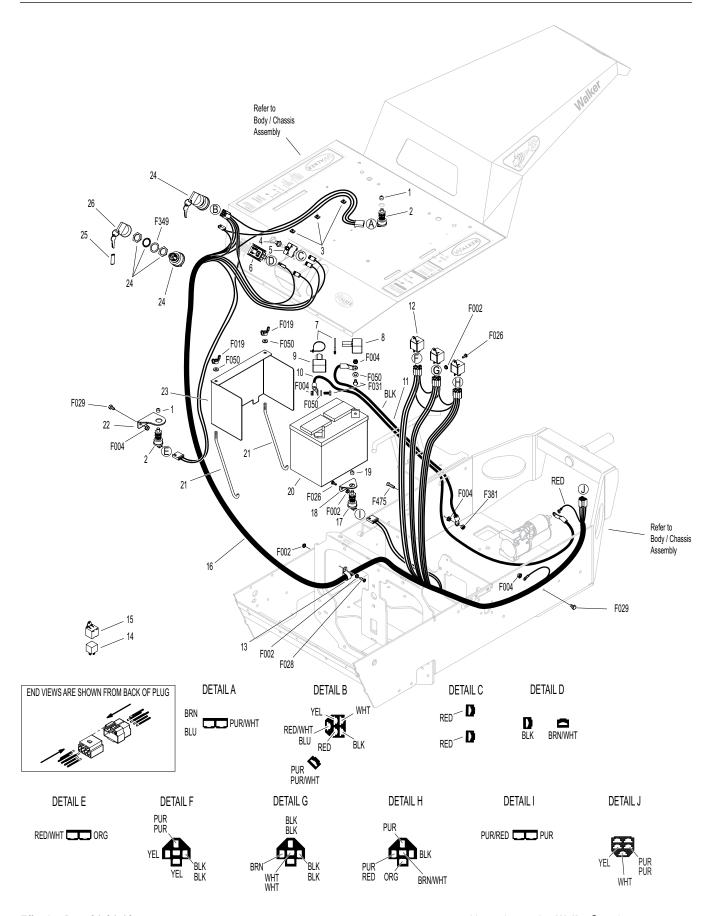
Effective Date 01-01-10

Use only genuine Walker® replacement parts.

# ELECTRICAL ASSEMBLY (MODEL MBK)

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Elect	rical Assen	nbly		Faste	eners		
1	5942-1	Switch Boot (Fits P/N 5942)	2		F002	10-24 Keps Nut	6
2	5942	Safety Switch (NO)	2		F004	1/4-20 Keps Nut	5
3	7834-3	Wire Saddle (3 Wires)	3		F019	1/4-20 ESNA Wing Nut	2
4	7941-3	Boot, Circuit Breaker	1		F026	10-24 x 1/2 PPHMS	4
5	7941-6	Circuit Breaker (15AMP)	1		F028	10-24 x 3/4 PPHMS	1
6	8990-1	Hourmeter (Sendec)	1		F029	1/4-20 x 1/2 Hex Bolt	2
7	5975-1	Cable Tie (18# x 3-3/4")	2		F031	1/4-20 x 5/8 Hex Bolt	2
8	5932	Battery Terminal Insulation Black (-)	1		F050	1/4 SAE Washer	4
9	5933	Battery Terminal Insulation Red (+)	1		F349	Washer .835 ID 1.122 OD, SS	1
10	4940-6	Battery Cable 33"	1		F381	1/4-20 Hex Nut	1
11	6923	Battery Cable (-)	1		F475	1/4-20 x 1 PFH Screw	1
12	6942	Relay Switch 30/40AMP (NC)	3				
		(Includes Items # 14 & 15)		*	Service Pa	rt Only	
13	5835	Cable Clamp (3/4)	1				
14	6941-6	Relay Switch 30/40AMP	*				
15	6941-7	Relay Mount	*				
16	4940-7	Wire Harness	1				
17	5941	Safety Switch (NC)	1				
18	4359-3	Switch Mount / Clutch	1				
19	5941-1	Switch Boot (Fits P/N 5941)	1				
20	7910	Battery (12V/275CCA/Dry)	1				
21	5839	Hook Bolt	2				
22	4024-12	Switch Mount	1				
23	4910-4	Battery Cover	1				
24	8960-15	Ignition Switch W/Keys	1				
		(Includes Items # 25, 26 & F349)					
25	7854	Plastic Tip, Red	1				
26	8960-3	Key Set W/Umbrella	1				

## **ELECTRICAL ASSEMBLY (MODEL MBK)**



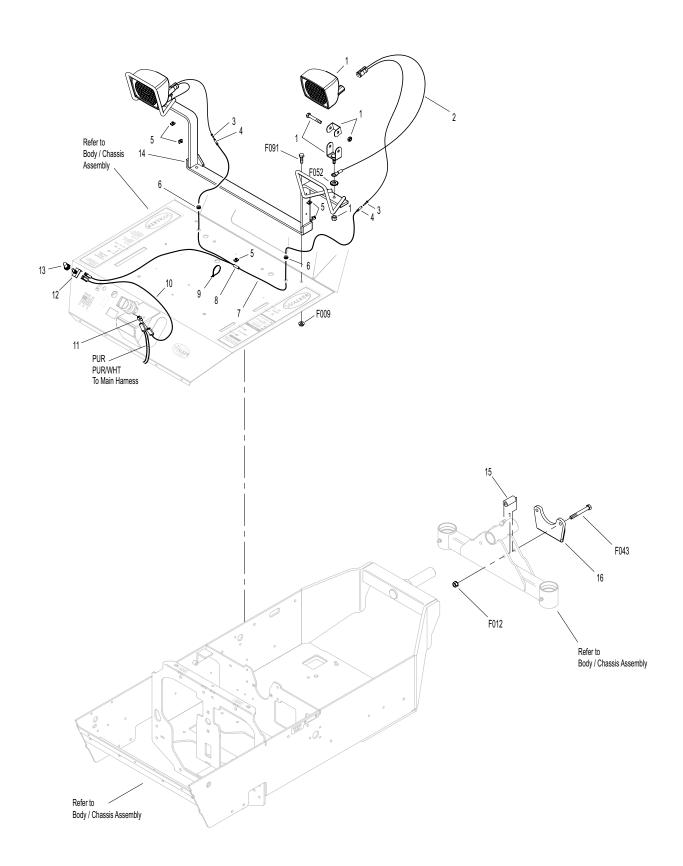
Effective Date 01-01-10

Use only genuine **Walker**® replacement parts.

## LIGHT KIT / HITCH KIT

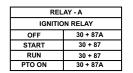
NO.	PART NO.	DESCRIPTION	NO. REQ'D	NO.	PART NO.	DESCRIPTION	NO. REQ'D
Kit	5989-11	Light Kit		Fast	eners		
		1-14, fasteners listed and instructions.	•				
dered	as a dealer-	installed option. Contact your Walker	dealer.		F009	5/16-18 Whiz Locknut	2
			_		F012	3/8-16 Keps Nut	2
1	7989-2	Light Assembly (Halogen)	2		F043	3/8-16 x 3 Hex Bolt	2
2	7989-3	Wire Harness Ext./Halogen	2		F052	5/16 External Star Lock Washer	2
_		(Includes Item #3)	_		F091	5/16-18 x 5/8 Hex Bolt	2
3	5996-4	16-14 GA Bullet Cntr. (M)	2	*			
4	5996-5	16-14 GA Bullet Cntr. (F)	2	^	Service Pa	rt Only	
5	7834-2	Wire Saddle (2 Wires)	9				
6	5977-1	Grommet (1/8 x 3/8)	2				
7	7995-4	Power Lead Wire Assembly	1				
_		(Includes Items # 6, 8 & 9)					
8	5996	1/4 x 16-14 GA QDF Terminal	1				
_		(Fully Insulated)					
9	5975-1	Cable Tie (18# x 3-3/4")	1				
10	6940-10	Jumper Wire	1				
11	5995-5	Piggyback Terminal	1				
12	5995	Toggle Switch (Off-On)	1				
13	5995-2	Switch Boot	1				
14	7993-1	Mount Bracket, Lights	1				
		Hitch Kit 15-16, fasteners listed and instructio	•				
ordere	eu as a deal	er-installed option. Contact your Walke	er dealer.				
15	4310-1	Spacer	2				
16	NS	Hitch	1				

## LIGHT KIT / HITCH KIT



## WIRING SCHEMATIC (MODEL MBV)

#### WALKER MODEL MBV Beginning S/N 2010-104436



RELAY - B START RELAY

> 30 + 87A 30 + 87

OFF

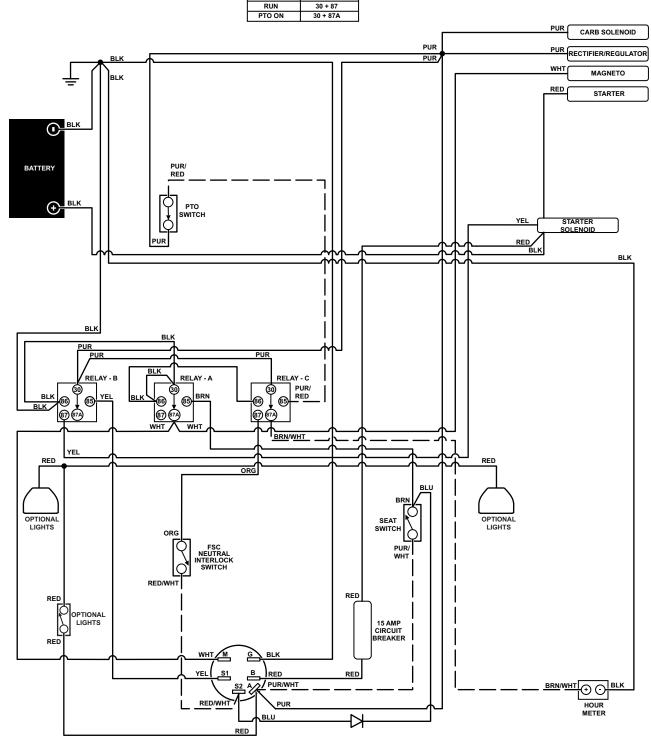
START

RELAY - C				
IGNITION RELAY				
OFF	30 + 87A			
START	30 + 87			
RUN	30 + 87			
PTO ON	30 + 87A			

IGNITION SWITCH CIRCUITS				
OFF	G + M			
START	B + A / S1 + S2			
RUN B+A				

- S1 = START CIRCUIT S2 = START/ACCESSORY CIRCUIT
- M = MAGNETO GROUND CIRCUIT

- B = BATTERY CIRCUIT
  A = ACCESSORY CIRCUIT
  G = GROUND CIRCUIT



Use only genuine Walker® replacement parts.

Effective Date 01-01-10

## WIRING SCHEMATIC (MODEL MBK)

#### WALKER MODEL MBK Beginning S/N 2010-104768 IGNITION SWITCH CIRCUITS RELAY - A RELAY - C IGNITION RELAY IGNITION RELAY OFF OFF 30 + 87A OFF 30 + 87A START B + A / S1 + S2 START 30 + 87 START 30 + 87 RUN B + A RUN PTO ON RUN PTO ON 30 + 87 30 + 87 S1 = START CIRCUIT 30 + 87A 30 + 87A S2 = START/ACCESSORY CIRCUIT M = MAGNETO GROUND CIRCUIT B = BATTERY CIRCUIT A = ACCESSORY CIRCUIT RELAY - B START RELAY G = GROUND CIRCUIT 30 + 87 30 + 87 30 + 87A PTO ON BLK STARTER YEL BLU STARTER SOLENOID PUR PUR RECTIFIER/REGULATOR PUR WH MAGNETO O BLK BATTERY $\oplus$ BLK BLK RELAY - C RELAY - B RELAY - A PUR/ RED 85 BRN YEL **65 66** 66 -66 #89 T ( (a) 87 (FA) WHT T<sub>BRN/WHT</sub> YEL RED RED OPTIONAL LIGHTS OPTIONAL ORG RED/WHT RED RED OPTIONAL LIGHTS 15 AMP CIRCUIT BREAKER RED RED RED BRN/WHT BLK PUR/WHT HOUR METER

Effective Date 01-01-10

Use only genuine Walker® replacement parts.

## MAINTENANCE AND SERVICE RECORD SHEET

DATE	SERVICE ITEM	ENGINE

# LIMITED WARRANTY FOR WALKER MODEL MBV AND MBK RIDER MOWERS

#### 1. WHAT THIS WARRANTY COVERS, AND FOR HOW LONG:

Walker Manufacturing company will, at its option, repair or replace, without charge, any part covered by this warranty which is found to be defective in material and/or workmanship within one (1) year after date of sale to the original retail purchaser unless the product is used for rental purposes, in which case this warranty is limited to ninety (90) days. At Walker's request, customer will make the defective part available for inspection by Walker and/or return the defective part to Walker, transportation charges prepaid. All parts and components of the Walker Mower are covered by this warranty **except** the following components which are warranted separately by their respective manufacturers:

Briggs & Stratton Engine Kohler Engine Hydro-Gear Transaxles Battery Tires

The available warranties covering these items are furnished with each mower. Walker does not assume any warranty obligation, liability or modification for these items, which are covered exclusively by the stated warranty of the respective manufacturers noted above.

#### 2. WHAT THIS WARRANTY DOES NOT COVER:

- A. This warranty does not cover defects caused by depreciation or damage caused by normal wear, accidents, improper maintenance, improper use or abuse of the product, alterations, or failure to follow the instructions contained in the Owner's Manual for operation and maintenance.
- B. The customer shall pay any charges for making service calls and/or for transporting the mower to and from the place where the inspection and/or warranty work is performed.

#### 3. HOW TO OBTAIN SERVICE UNDER THIS WARRANTY:

Warranty service can be arranged by contacting the dealer where you purchased the mower or by contacting Walker Manufacturing Company, 5925 East Harmony Road, Ft. Collins, CO 80528. Proof of the date of purchase may be required to verify warranty coverage.

#### 4. WARRANTY LIMITATION:

- A. THERE IS NO OTHER EXPRESS WARRANTY. ANY WARRANTY THAT MAY BE IMPLIED FROM THIS PURCHASE INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IS HEREBY LIMITED TO THE DURATION OF THIS WARRANTY AND TO THE EXTENT PERMITTED BY LAW ANY AND ALL IMPLIED WARRANTIES ARE EXCLUDED. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.
- B. WALKER WILL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES AND/OR EXPENSES IN CONNECTION WITH THE PURCHASE OR USE OF THE MOWER. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation(s) or exclusion(s) may not apply to you.
- C. Only the warranty expressed in this limited warranty shall apply and no dealer, distributor, or individual is authorized to amend, modify, or extend this warranty in any way. Accordingly, additional statements such as dealer advertising or presentations, whether oral or written, do not constitute warranties by Walker, and should not be relied upon.
- D. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

#### Sound - Model MBV

#### **Sound Test**

Sound test conducted was in accordance with 2000/14/ EC and was performed on 28 May 10 under the conditions listed:

 General Condition:
 Clear

 Temperature:
 85 (F)° 29 (C)°

 Wind Speed:
 < 5 mph (< 8 kmh)</td>

 Humidity:
 20%

 Barometric Pressure:
 83.8 kPA

Deck Size < 122 cm

Deck Size > 122 cm

Lwa **94**  LpA **74** 

Lwa **97**  LpA 76

OPERATOR

# Vibration - Model MBK

Vibration - Model MBV

**Vibration Level** 

vibration test equipment.

Tests were performed on 28 May 10 under the

Clear

20%

Wind Speed: < 5 mph (< 8 kmh)

Barometric Pressure: 83.8 kPA

85 (F)° 29 (C)°

conditions listed:

General Condition:

Temperature:

Humidity:\_\_\_\_

Vibration levels at the operators handles

longitudinal directions using calibrated

were measured in the vertical, lateral, and

#### **Vibration Level**

1.51g

Vibration levels at the operators handles were measured in the vertical, lateral, and longitudinal directions using calibrated vibration test equipment.

Tests were performed on 28 May 10 under the conditions listed:

General Condition:	Clear
Temperature:	85 (F)° 29 (C)°
Wind Speed:	< 5 mph (< 8 kmh)
Humidity:	20%
Barometric Pressure:	83.8 kPA

#### Sound - Model MBK

#### **Sound Test**

Sound test conducted was in accordance with 2000/14/ EC and was performed on 28 May 10 under the conditions listed:

 General Condition:
 Clear

 Temperature:
 85 (F)° 29 (C)°

 Wind Speed:
 < 5 mph (< 8 kmh)</td>

 Humidity:
 20%

 Barometric Pressure:
 83.8 kPA

Deck Size < 122 cm

Deck Size > 122 cm

Lwa **95** 

LpA 75 Lwa 97 LpA 77

OPERATOR



WALKER MFG. CO. • 5925 E. HARMONY ROAD, FORT COLLINS, CO 80528 • (970) 221-5614 FORM NO. 041510 PRINTED IN USA www.walkermowers.com ©2010 WALKER MFG. CO